

Application Area Interior Office Fit-Out Version No: 1.0

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## 1. Introduction

SHE (Safety, Health and Environment) is an integral part of Roche’s corporate vision, values, operating standards and guidelines. SHE is handled with the same sense of responsibility, and just as methodically, as aspects pertaining to quality, productivity and cost efficiency. The purpose of this procedure is to outline the what Roche expects to be adopted during the planning and construction stages of fit out projects being undertaken on their behalf internationally.

The application of procedure shall ensure that SHE aspects are always assessed and managed appropriately in construction fit out projects according to the needs of each project phase. All construction fit out projects must apply this procedure to:

- Manage all SHE relevant risks during construction
- Comply with all applicable Roche SHE requirements and local SHE statutory laws and regulations

This procedure is based on the Roche SHE policy and associated SHE guidelines and directives, which take precedence over locally applicable laws and regulations, whenever they meet or exceed the local requirements. Any requirements beyond the scope of this guideline may be applied as required, so far as they do not contradict this procedure. This procedure references the relevant K Directives which ensure local SHE legislation is being complied.

## 1.1 Scope

This procedure applies to all projects involving the construction fit out of office of commercial property. This includes the refurbishment and reconfiguration of such premises to adapt them for business purposes.

## 1.2 Definitions

Client	Roche are defined as the client for all works
Construction SHE Plan	This is a plan that is provided by the principal contractor prior to undertaking works that outlines how construction SHE is to be managed on the project. It should be specific for the project and be regularly reviewed to update any changes. It should be available on site and contractors must have access to it.
Incident	Any event resulting from an unplanned act that is contrary to health and safety standards and that resulted in a loss of time.
PPE	Personal Protective Equipment
Pre-Construction Information	This is defined as information to be provided to all interested parties at the outset of the project to aid them in planning for project SHE. This information should be relevant to the works. Typical examples include, existing service drawings, asbestos management surveys, operation and maintenance manuals etc.
Principal Contractor	Main contractor appointed by the client to undertake the works. This appointment will typically engage the sub-contractors required to do the works. They are also responsible for the SHE arrangements for the project and managing and monitoring SHE performance on site. For further details see section 2.2.1.
KPI	Key Performance Indicator
RA/MS	Risk Assessment and Method Statement – A risk assessment is a formally recorded assessment of the risks involved with a particular activity and it identifies the measures required to reduce the risks. The Method Statement is a clearly defined and formally recorded safe method of undertaking a specific task involving risk. This must be communicated to all those involved with the project.

Roche SHE Officer	This is the locally appointed Roche representative responsible for ensuring SHE protocols are being followed.
SHE	Safety, Health and Environment
SSoW - Safe System of Work	This is a further control measure for undertaking higher risk activities that may require a formal recorded process to be undertaken to ensure safety e.g. isolation procedures for electrical works, hot works etc.

## 2 Planning For SHE

Section 2.2 identifies the arrangements that shall be adopted to ensure SHE is integrated in the construction planning stages of projects. It is important to consider H&S during the planning stages for construction to ensure proper allowances are being made for the project.

### 2.1 Roles and responsibilities

This section identifies the roles and responsibilities of those involved with the procurement, management and delivery of construction projects. Specific details of the requirements of the duties are contained within the documents content.

#### **Pre-Tender**

Role	Responsibility
Procurement Manager	<ul style="list-style-type: none"> <li>- Ensure contractor and consultant competence questions are included in tender documentation (See section 2.2)</li> <li>- Review and assess competence questions (See section 2.2) in tender review</li> <li>- Ensure inclusion of pre-construction information and design SHE risks in tender information</li> <li>- Ensure appointment of a contractor with the single responsibility for managing the coordination of activities on site and SHE. This single contractor will be named the principal contractor (see section 2.2.1)</li> </ul>
Roche Project Manager	<ul style="list-style-type: none"> <li>- Ensure Roche SHE Officer is aware of project</li> <li>- Ensure inclusion of pre-construction information (See section 2.2.3) in tender packages</li> <li>- Ensure design SHE risks are included in the tender information</li> <li>- Ensure local SHE legislation is being complied with</li> </ul>
Roche SHE Officer	<ul style="list-style-type: none"> <li>- Ensure those with responsibilities in this procedure are undertaking them</li> </ul>

Principal contractor	<ul style="list-style-type: none"> <li>- Develop a construction phase SHE plan outlining the arrangements to manage and monitor SHE during the project</li> <li>- Ensure they engage sub-contractors that are competent to undertake the works safely</li> </ul>
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## Construction

Role	Responsibility
Roche Project Manager	<ul style="list-style-type: none"> <li>- Ensure principal contractor manages SHE risks in accordance with this document and local Health and safety Legislation</li> </ul>
Roche SHE Officer	<ul style="list-style-type: none"> <li>- Ensure principal contractor is managing SHE risks in accordance with this document and local SHE legislation</li> <li>- Ensure Project Manager is monitoring principal contractor SHE</li> </ul>
Principal Contractor	<ul style="list-style-type: none"> <li>- Plan, manage and monitor the SHE of the project and sub contractors through the construction stages (see section 2.2.1)</li> </ul>

## Post Construction

Role	Responsibility
Roche Project Manager	<ul style="list-style-type: none"> <li>- Ensure the area is safe for occupation following construction works</li> <li>- Ensure SHE information is contained in contractor handover documentation</li> </ul>
Roche SHE Officer	<ul style="list-style-type: none"> <li>- Ensure principal contractor must also be complied with. - manages SHE risks in accordance with this document and local SHE Legislation</li> <li>- Ensure Project Manager is monitoring principal contractor SHE</li> </ul>

## 2.2 Planning Construction

This section describes the arrangements that those parties identified in the section 2.1 are expected to implement to ensure projects are delivered in a way that is safe and minimises risk to anyone affected by the works and the environment.

### 2.2.1 Principal contractor

A single contractor shall be appointed to be responsible for managing SHE during the Roche DTRF Fit-out Construction Safety

construction of the project. This party shall be known as the principal contractor and they will be expected to have suitable SHE knowledge and experience of managing SHE to be appointed as principal contractor.

There should only be one principal contractor responsible for a designated site area. Where Roche directly appoints a contractor or where there is a contractor working on the project that is not contractually linked to the principal contractor, they shall adopt the principal contractor's rules and implement them. Failure of them or any other contractor to comply with the principal contractors SHE arrangements on site may result in them being stood down at their own financial cost.

The construction site is defined as the area in which the principal contractor is responsible for undertaking construction works. The boundaries of this area will be agreed at the pre-construction stage.

### 2.2.2 Competence

Roche project teams will take all reasonable steps to ensure the competence of those being appointed to undertake construction fit out works. All tender documentation issued to contractors or consultants tendering for work on Roche projects shall request details of the following;

Experience – Can you provide three examples of previous projects you have delivered successfully without SHE incidents in the last five years.

Knowledge – Can you provide details in the form of a CV of the team you are proposing to use to manage the delivery of the project. Please include SHE qualifications, technical qualifications and project experience.

Skills – Please provide details of how you ensure the competence in relation to SHE of your supply chain and sub-contractors that you will be using for these works.

For more complex projects it may be advisable to ask further questions to gauge the competence of the contractor tendering for the work.

Tenders should be evaluated by the Roche procurement team and Roche PM to ensure parties being appointed are competent to undertake the work safely.

### 2.2.3 Pre-Construction Information

Information that is relevant to the safe planning and management of the project should be provided to contractors in advance of them tendering for the work. It may be necessary to include additional/revised information after contractor appointment and before works start. The headings below represent a possible, but not exhaustive list of relevant topics to cover:

- Existing services layouts and as built drawings
- Existing building SHE information
- Operation and maintenance manuals for building assets being affected by works
- Details of hazardous substances present on the site (including asbestos and lead)
- Details of hazardous client activities on site (for example industrial manufacturing processes) - Details of working time restrictions
- Emergency evacuation arrangements for building. Especially important on shared premises where construction fire arrangements need to be coordinated with existing building users - Security arrangements for the premises
- Fire arrangements for the building – fire alarm testing, isolation procedures, means of raising alarm - Traffic management and logistic arrangements specific to the premises
- Permits to work – The may be managed by a premise's facilities management company - Services isolation procedures
- Site rules for the premises
- Roche - Contractor Fit Out Standard Operating Procedure
- Structural and fabric information

If certain important and relevant information is not available at tender stage, it should be stated as such at tender and the Roche Project Manager should ensure the information is provided early in

the pre construction stage.

#### 2.2.4 Shared Premises

Where works are being undertaken on premises not owned by Roche and/or in shared premises, it is important that any specific SHE information defined by the premises owner is obtained and shared with contractors and consultants. This may include but is not limited to;

- Permit to work systems
- Isolation procedures
- Restricted locations
- Site rules
- Emergency Arrangements

Informing Roche/Genentech and other contractors and subcontractors in the same work area or adjacent areas of any hazards.

The principal contractor is to ensure that any SHE arrangements for shared premises are integrated into their own SHE arrangements for the site.

#### 2.2.5 Design SHE Risks

Design SHE risks are SHE risks that are created through the design process and affect the SHE of those responsible for building, using or maintaining. Designers will take reasonable steps to eliminate and reduce risks as much as possible by identifying the hazards and implementing necessary arrangement to manage them. This information should be developed in the early design stages when it is easiest to design out risk. It should be continued to be developed all the time design is taking place (including during construction on design and build projects)

#### 2.2.6 Construction Phase SHE Plan

The principal contractor will be responsible for producing a plan detailing how the construction phase of the project will be managed safely. This should be available for review by the Roche SHE Officer and Project Manager in good time prior to works being undertaken. It should be reviewed by the principal contractor at regular intervals or when there are changes that affect the SHE arrangements for the project. The Construction Phase SHE Plan should be specific and contain as a minimum the following details;

- Site details
- Roles and responsibilities
- Arrangements for Emergencies
- Welfare and First Aid arrangements
- Site Rules
- Details of significant risks
- Process for the submission and review of risk assessments and method statements - PPE requirements
- Details of safe systems of work, permits to work and isolation
- Arrangements for reporting accidents incidents and near misses (See 3.2.29)

#### 2.2.7 Key Performance Indicators

All contractors will be responsible for ensuring projects work to achieve a goal of zero incidents. Contractors will be measured for compliance against this procedure document by the Roche Project Manager. Roche contractor will be expected to budget for provision of health and safety monitoring and equipment in all costs.

The Principal Contractor will be expected to provide a monthly SHE report which will include the following headlines;

- Hours worked in month
- Number of incidents, accidents and near misses in month
- Findings from 1no Principal Contractor SHE audits (to be undertaken monthly alongside daily walk arounds by the Site Manager)
- Critical SHE matters and observations

Roche will undertake a number of unannounced safety inspections on the site to monitor contractor SHE performance. Where significant issues are identified the contractor will be expected to address these within the given time. In the instance that life threatening conditions are identified on site, works will cease until the situation is rectified. Any monetary or programme loss will be at the contractor's expense.

## 3 Construction SHE

### 3.1 Safety & Health Management

This section identifies the management arrangements principal contractor will be expected to have in place to ensure they are managing their works safely.

#### 3.1.1 SHE Inspections and Audits

The principal contractor will be expected to appoint a person/organisation competent in construction SHE to undertake regular SHE inspections of the construction works. Reports should be thorough and cover the relevant sections of this procedure. A copy of the SHE Inspection Report should be included in project reporting to the Roche Project Manager and Roche SHE Officer.

The principal contractor shall ensure all findings are closed out within the agreed timescales and inform the Roche PM once complete.

The Roche PM and SHE officer will agree the frequency at which Client SHE Inspections will be undertaken at the beginning of the project. These may increase depending on factors such as high risk works or poor contractor SHE performance.

#### 3.1.2 Conduct

All persons working on Roche projects will be expected to embrace the following principles;

- Respect towards the community, all fellow workers and others effected by their actions
- An open-door policy on SHE issues that encourage all to freely raise issues
- Pride in collaborating towards a safe and healthy working environment

The above should be communicated to workers during site inductions.

#### 3.1.3 Training

Anyone responsible for putting someone to work to perform a particular task that involves risk will ensure that person has the necessary training to undertake the task safely. The principal contractor will be responsible for monitoring this and making sure only competent and trained operatives are undertaking tasks involving risk.

The principal contractor will be expected to keep records on site in the form of photocopies of the training and qualifications of their workers and their sub-contracted workers.

#### 3.1.4 Risk Assessment and Method Statements

All contractors will be expected to have in place risk assessments and method statements relating to works they are undertaking that involve SHE risks. All risk assessments and method statements should be provided to the principal contractor in good time prior to the works being undertaken for review. The principal contractor should review and approve risk assessments and method statements.

All details within the risk assessments and method statements should be communicated to the workers prior to them undertaking the works. Workers should be fully aware of safety arrangements in place for their benefit.

### 3.1.5 Task Planning

The principal contractor should ensure task planning is undertaken at the beginning of each shift. This should be an informal discussion with workers to communicate the following:

- Any particular site risks or restrictions present that day
- SHE arrangements for the works being undertaken in that working days shift
- Details of who is the construction manager for the working shift

### 3.1.6 Safe Systems of Work

High risk operations shall be planned and have written safe systems of work in place. These are defined as activities requiring a specific working methodology to ensure the safety of operatives undertaking the role e.g. electrical isolations, hot work, prolonged working at height etc. These operations will be undertaken and supervised by skilled and competent persons that have proven experience in undertaking the types of specified task. The plans for these tasks will be in compliance with any local legislation that will apply to these types of work.

All written plans are to be approved by the principal contractor before they are undertaken. Details that safe system of work (SSOW) must include are as follows;

- Contractors details – Name and address
- Project details including scope of works that SSOW relates to
- Name of person responsible for developing SSOW
- Name of person from contractor undertaking works authorising SSOW
- Principal contractor responsible for reviewing SSOW
- Principal contractor approval box
- Date and version
- Details of competent person (including name and qualifications) supervising works
- Details of works sequence and associated risks
- Details of risk control measures in place
- Details of Permit to Works that are required
- Details of equipment that is required to undertake task
- Details of inspections or tests that are required for the plant or equipment being used - Details of individuals competencies required to perform the task e.g. mobile working platform certificates, Confined spaces training certificates etc
- Contingency and/or emergency procedures

### 3.1.7 Permits to Work

The principal contractor shall have in place a Permit to Work procedure to control works requiring a safe system of work to be in place. This should the following as a minimum;

- Key hazards
- Safe System of work to be implemented
- Named responsible persons
- Date and time permit is live for
- Close down procedures to ensure work area is safe upon completing the work

Permits should be two forms. One copy retained with the authoriser and one copy retained with the person performing the task. The operators copy should be returned to the authoriser in order to close down the permit operation.

As minimum Roche expect a permit to work procedure to be implemented for the following activities;



- Hot work
- Confined space entry
- Roof work
- Asbestos/lead related work

### 3.1.8 Services Isolations

Where it is necessary to work on electrical or mechanical systems those services will be isolated prior to commencing work. Physical means of preventing the re-energisation of electrical systems should be in place such as electrical lockout mechanisms. Isolation signage should also be used to warn that the system is isolated.

Where working on shared premises or premises not controlled by Roche there may be further requirements for managing the isolation of services.

No live electrical working should be undertaken on Roche projects. Failure to implement or comply with this procedure will result in a serious breach of Roche SHE rules.

## 3.2 Site Safety

This section identifies measures that shall be undertaken by the principal contractor to ensure the safety of the workers and those affected by the works.

### 3.2.1 Site Security

The principal contractor will take measures to ensure the construction site is secured to prevent third parties accessing and being exposed to construction hazards. In the construction fit out environment this may include creating safe zones beyond doors to make those accessing from stairwells aware that they are entering a construction site, without restricting emergency access or egress.

The principal contractor will operate their own signing in book that will detail the following;

- Name
- Company
- Start on site time
- Finish on site time

Workers will be expected to carry identification that authorises them to work on the construction site.

### Site and Building Access

Contractors are subject to Roche's access policies and procedures. Depending of the work, access to Roche facilities may require the use of a Roche-issued access badge.

### 3.2.2 Hoarding / Security Fencing / Barriers

The principal contractor is responsible for ensuring any hoarding, security fencing or barriers used to prevent unauthorised access to the site are installed properly and are sufficient to withstand any loads it is exposed to including:

- Crowd loading
- Vehicle / Machinery
- Wind

### 3.2.3 Signage

Suitable signage should be displayed at access points and in general around the site to make other aware of the presence of a construction zone. Signage should also indicate amendments to occupant's access arrangements and emergency arrangements. The principal contractor should use pictorial signage as much as possible. Any text should be written in the language most relevant to the area it is being used in.

#### 3.2.4 Considerate Neighbour

The principal contractor will make others in close proximity aware of the construction works and make them aware of any amendments to their access or emergency arrangements. The principal contractor is expected to frequently make neighbouring occupants aware of noisy works and any other likely disruptions (e.g. nuisance odours) to the function of the neighbouring occupant's business. This can be either through meeting with the heads of the neighbouring occupants or through leaflet drops.

In all shared premises all noisy works must be planned and communicated in advance. They must be agreed with landlord and tenants and should be of short periods of time. All excessive noise shall be planned with the buildings shared occupants to ensure it does not disrupt their business operations. This may include undertaking works out of hours.

All common and shared areas and emergency lighting should remain suitably lit whilst the principal contractor is responsible for the site.

All common areas such as lobbies, elevators, walkways etc must remain clear of stacked materials that may fall and hurt building users or obstruct access in the event of an emergency. Where it is necessary to rely on existing building welfare facilities (toilets, kitchen space) the principal contractor must ensure

they remain in a clean state throughout the project. At the end of each working day the principal contractor must check all common areas to ensure they are clean and free from risk before leaving site.

#### 3.2.5 Site inductions

The principal contractor responsible for managing the site will ensure they provide anyone working or visiting the site a safety induction. The site safety induction should include as a minimum the following topics;

- Signing in procedures
- Personal Protective Equipment rules
- Emergency arrangements

- Welfare and First Aid arrangements
- Information on relevant hazards
- Work environment considerations
- Accident and incident reporting

#### 3.2.6 Traffic and Pedestrians

The principal contractor will ensure there is sufficient and safe space for the loading and unloading of materials to the fit-out construction site area. Where loading bays are present the principal contractor will ensure deliveries and traffic is managed in these areas in accordance with the local arrangements for the loading facility. All delivery and vehicle movements should be planned and accompanied by a

competent banksman wearing suitable high visibility clothing. Vehicles should be segregated from pedestrians at all times, clear demarcation of pathways should be undertaken to identify the separate routes.

### 3.2.7 Material Deliveries

The supplying of materials to the construction site should be planned to minimise interface with existing building occupants and other third parties that may be affected. Where there is a requirement to transport large, heavy materials or equipment to the construction site area in occupied buildings, the works should be planned to be undertaken out of the occupants normal working hours. Where this is not possible, a worker should be appointed to escort those transporting the materials to ensure they do not interfere with other building occupants.

### 3.2.8 Plant and Machinery

The principal contractor will ensure that all plant and equipment to be used is fit for purpose and only operated by persons trained and authorised to do so. All plant or equipment emitting fumes through an exhaust shall be sited away from excavations, building inlets and hoardings.

All safety devices and guards fitted to plant and equipment must not be removed, altered or tampered with. All manufacturers' information for the respective plant must be retained on site and available to the user at all times.

The principal contractor will ensure formal inspections and operator inspections are undertaken to all plant and equipment. This must be in accordance with the manufacturers' instructions and relevant local legislations applicable to that piece of plant or equipment. This information must be retained on site and will be subject to Roche internal audits.

### 3.2.9 Electrical Equipment

The principal contractor will ensure that all electrical equipment is fit for purpose and that it is regularly inspected and tested. The principal contractor should avoid the use of 240-volt equipment (or other high voltage equipment) and where possible adopt the use of battery-operated equipment. All electrical supplies and components should be;

- 110 Volt or stepped down where available depending upon country
- Fitted with a circuit breaker to isolate damaged electrical circuits
- Of suitable standard for use on a construction site
- In good condition and tested before being used on site (unless brand new)
- All components must be suitably protected from construction activities
- All electrical tools and components will be tested every 3 months and marked accordingly. A register should also be kept by the contractors. Inspections should meet local legislative requirements e.g. PAT in the UK
- All 240v chargers for battery tools will be retained in one safe place for charging

### 3.2.10 Hot Work

Hot work is defined as any task or operation that results in a source of ignition being created (including sparks and hot swarf). Where possible the principal contractor should endeavour to design out the requirement for hot work processes on construction projects. Measures to reduce or eliminate hot work include;

- Push fit/cold compression fittings (instead of soldering)
- Reciprocation cutting (instead of abrasive wheel cutting)
- Cold lay bitumen products (instead of hot bitumen)
- Bolted and spliced steel sections (instead of welding)
- Wet sand (instead of hot paint strip)

Where hot work is unavoidable, it should be controlled using a hot work permit that will identify the safe system of work required to control the process. This will include;

- Firefighting equipment to be provided nearby
- PPE required
- Minimum duration of fire watch following process (minimum 1 hour)
- Persons responsible for undertaking works and responsible for ensuring the works have been completed safely

For further details of permit to work processes please see section 3.1.7 Permits to Work

### 3.2.11 Confined Space Work

A confined space is defined as any a place that is substantially enclosed (though not always entirely), and where serious injury can occur from hazardous substances or conditions within the space or nearby (e.g. lack of oxygen). The principal contractor should avoid undertaking these works by considering if the space can be accessed remotely (CCTV) or if there is an alternative means of undertaking the work.

Where it is necessary to access confined spaces a safe system of work should be implemented that includes measures required by local legislation and confined space entry should be controlled by permit to work.

### 3.2.12 Working at Height

The principal contractor is to ensure they provide safe means of working at height for workers. This should be collective fall prevention that ensures the worker has a safe and stable platform to work from. Examples of this include;

- Scaffolding towers
- Mobile Elevated Work Platforms
- Pop ups
- Ladders

Temporary work at height access equipment should be erected by trained persons and inspected frequently or in accordance with local legislation.

Ladders should only be used for works of short duration (5-10 minutes) and where three points of contact can be maintained. Ladders should be inspected regularly to ensure they are in good order and suitable for the works being undertaken.

### 3.2.13 Scaffolding

In the instance that scaffolding is required it should be designed and installed by competent and qualified persons in accordance with localised standards, guidance and legislation. As a minimum requirement edge protection should always be at 900mm high with a mid-rail and toe board. All lifts should preferably be accessed by staircase but where not possible ladders should be tied to the structure with trap doors or scaffold gates to prevent exposed edges. All ladders must extend 1.5m above the scaffolding lifts and be positioned to not create excessive stretching or leaning to access.

All scaffolding structures should be designed to take loads they are foreseeably likely to be exposed to including weather, material weights and potential vehicle/plant collisions.

Means of accessing scaffolding should be removed to prevent third parties gaining access when not in use and in some instances, it may be necessary to procure an alarm system to deter third part access to scaffolding.

All scaffolding should be erected by competent scaffolding operatives using the necessary working at height equipment e.g. harness and lanyard, fall arrest blocks.

Scaffolding should be provided with a certificate to prove it has been installed safely (handover certificate) and should be inspected every 7 days after by a competent person or following a significant event such as weather or ground movement. Scaffolding should only be altered by authorised and trained persons.

### 3.2.14 Lighting

The principal contractor should ensure suitable lighting is provided to the work area to enable workers to access around the construction site safely and to undertake tasks safely. Risk assessment should identify if task-specific lighting is required.

### 3.2.15 Dust

The principal contractor will take measures to avoid processes that create dust including fabrication, cutting and drilling of components offsite. Where dust cannot be avoided suitable measures should be implemented to capture dust at source and control it. Local exhaust ventilation and if possible, damping down should be considered. The use of brooms should be limited with preference given to vacuuming.

Where dust is likely to be produced from demolition of internal building fabric or removal of assets such as ducting the principal contractor should ensure dust is controlled so far as is practicable and operatives provided with the necessary respiratory protective equipment.

### 3.2.16 Noise

The principal contractor will limit operations that will create excessive noise. Where it is unavoidable, they will provide all those likely to be affected with hearing protection. Where risk assessment identifies that workers are to be exposed to noise in excess of 80db (If a worker is 1m away and has to shout to be heard) over a working day the principal contractor shall ensure the noise exposure to workers is monitored.

Depending on the activities to be undertaken in the facility delivered by the project, measures to prevent damage to workers' hearing may be necessary to incorporate into the project design. These measures may include selection of equipment below a certain noise level, physical separation of loud equipment and/or insulation in order to comply with the exposure limit values defined in Annex 1 of K4 Directive.

### 3.2.17 Housekeeping

The principal contractor will be responsible for ensuring the construction site is maintained in good and tidy order. Waste should frequently be removed from site and materials should only be brought to site as required. The site should be free from excessive trailing cables and leads and any liquid spills should be cleaned as soon as they are reported.

Any voids in the floor or ground undulations should be signed posted and covered as far as is reasonably practicable to prevent trips and falls.

### 3.2.18 Use of Hazardous Substances

Where possible the principal contractor should avoid specifying hazardous substances or allowing sub contractors to use hazardous substances. Instead, process or substances should be altered to eliminate the use of the substance or to replace hazardous with less hazardous substances.

The principal contractor will ensure a risk assessment and method statement is produced based on the manufacturer's literature for the safe use of any hazardous substance specified on the project. The principal contractor will ensure the necessary PPE and safety controls are implemented for the use of hazardous substances.

The K22 Directive establishes the safe handling requirements for chemicals purchased, stored, used and disposed of within the Roche Group. Depending on the type of project, technical aspects such as ventilation, physical separation, fire detection and extinguishing systems, spill containment and fire water retention may need to be considered.

Asphyxiating gases may be life-threatening if handled incorrectly or in case of incidents. The K16 Directive specifies the necessary measures to eliminate or at least minimise such risks. The potential for asphyxiating atmospheres occurring in facilities delivered by projects must be evaluated and the necessary preventive measures taken.

### 3.2.19 Storage of Hazardous Substances

Where the use of hazardous substances is unavoidable, they should be removed from site at the end of the working day or stored in a steel cabinet in a well-ventilated area with the corresponding fire appliances nearby. Plant and machinery requiring petroleum-based fuels shall be prohibited from site.

### 3.2.20 Fire precautions and Arrangements

The principal contractor will be required to comply with Roche directive Fire Protection (K21). This directive prescribes a risk-based approach to developing individually tailored and cost-effective fire

protection solutions for specific circumstances. Every Roche site must maintain a Fire Protection Strategy (FPS) which documents the fire risks, statutory requirements (including local laws, permits, codes, ordinances and standards) and fire protection measures implemented on the site. Depending on the project, the existing FPS may need to be updated or a new FPS may need to be created. K21 Annex 1 defines additional mandatory requirements for warehouses.

The principal contractor will include in their Construction Phase SHE Plan details of fire precautions and arrangements. These shall include the following;

- Ensuring suitable firefighting equipment (extinguishers, blankets) are present on site during the works
- Ensuring suitable means of raising the alarm in the event of a fire
- Details of emergency contact information and local emergency services
- Ensuring suitable life safety systems are maintained throughout the works
- Fire Marshal (See 3.2.21) who will undertake inspections of the site and premises to ensure no emergency evacuation routes are blocked
- Ensuring measures to maintain fire compartmentation are compliant with local legislations throughout construction works, including mechanical fire dampers

Life safety systems/fire detection should be maintained throughout the construction works. Arrangements to ensure the reactivation of any isolated fire detectors at the end of the shift shall be implemented to ensure there is fire detection in the building at all times. Alternatively, changing smoke detection for heat detection should be considered to eliminate the chances of false activations from construction dust or vibration.

### 3.2.21 Emergency Arrangements

The principal contractor will ensure suitable emergency arrangements are developed and communicated to the workers as part of their site induction. These arrangements should include the location of a safe point of evacuation (muster point), routes through the building, times for fire alarm testing and any other local emergency arrangements for the premises.

The principal contractor should appoint a Fire Marshal who will ensure workers make their way to the evacuation point in the event of the alarm sounding. This person must conduct a regular walk around of the site to ensure the following;

- There are no potential sources of ignition
- All access routes are clear and unobstructed
- Fire extinguishers are undamaged and in suitable locations

### 3.2.22 Excavation Works

In the event that excavation works are required, the principal contractor will take measures to identify the presence of any services prior to breaking ground. Ground scans should be undertaken (CAT & Genie) to ascertain the presence and position of any underground services. Where services are detected hand dig techniques should only be used within 500mm of the identified service. The services should be exposed from the side to avoid pressure being placed downwards on the service.

All installed and identified services below ground should be identified on as built drawings provided to Roche upon completion of the works.

### 3.2.23 Demolition

Where there is a requirement to demolish parts of a building or create openings the principal contractor will ensure they have suitable information detailing any potential hidden services or imposed loadings from supporting structures.

Where walls and openings are load bearing the Principal Contractor will ensure a competent and qualified structural engineer designs suitable temporary supporting structures such as props. This designer should ensure any temporary supports are installed in accordance with the design and inspected regularly following its installation.

### 3.2.24 Asbestos

The principal contractor shall comply with all local legislation regarding the management of asbestos. Where the premises dates from before the time at which asbestos ceased to be used in

that country or if there is suspicion that asbestos is contained within the building a survey should be commissioned to determine the exact location of asbestos. Roche will not have people undertaking work on its behalf exposed to asbestos fibres. Asbestos should be removed or encapsulated by suitably qualified and competent persons in accordance with local legislation.

Following any asbestos removal or intrusive survey work that may lead to the release of asbestos fibres the principal contractor will ensure the provision of air clearance certificates to the building occupants prior to them re-occupying the area.

### 3.2.25 Hazardous Materials and Substances

The principal contractor will comply with local legislation regarding hazardous and banned materials. This list may differ depending upon the country works are being undertaken in.

### 3.2.26 Manual Handling

Works should be designed in such a way as to minimise the requirement for manual handling. Mechanical handling (sack barrows, trolleys etc) should be used where possible. All operatives should receive training from the principal contractor on the principles of good manual handling.

### 3.2.27 Welfare Facilities

The principal contractor will ensure suitable welfare facilities are provided for workers. Workers will be deemed suitable if they contain as a minimum the following;

- Drinking water (labelled as drinking water)
- Seating with back rests and table
- Clean area for the preparation of food
- Means of preparing hot beverages
- Cups and vessels for drinking
- Microwave for the preparation of hot food
- Flushing toilets with supply of toilet paper (1 toilet for up to 15 staff, 2 for up to 30 staff, 3 for up to 60 staff – all separate or lockable unisex)
- Facilities for washing hands complete with soaps and clean towels or single use paper napkins

If required, depending upon nature of works;

- Clothes changing facilities
- Clothes drying facilities
- Locker storage for valuable items

Workers should have available to them an amount of uninterrupted rest time compliant with all local legislation. The K1 Directive has been designed to fulfil Roche's commitment to provide healthy workplaces. It establishes a common basis for local management to define the fundamental measures that need to be taken in order to protect the health of the employees from occupational hazards. Such measures must be considered in all projects and be documented in the SHE deliverables.

### 3.2.28 First Aid

Principal contractor shall undertake a first aid assessment and appoint the necessary number of first aiders accordingly. It may be necessary to ensure first aiders have additional skills including the use of AED (defibrillators). The first aid risk assessment must identify the first aid equipment that is required to be supplied in the first aid box. As a minimum it should contain the following;

- Plasters in a variety of different sizes and shapes
- Small, medium and large sterile gauze dressings
- At least 2 sterile eye dressings
- Triangular bandages
- Crêpe rolled bandages
- Safety pins
- Disposable sterile gloves
- Tweezers
- Scissors
- Alcohol-free cleansing wipes

- Sticky tape
- Digital thermometer (not mercury)
- Skin rash cream, such as hydrocortisone or calendula
- Cream or spray to relieve insect bites and stings
- Antiseptic cream
- Painkillers such as paracetamol aspirin, or ibuprofen
- Cough medicine
- Antihistamine cream or tablets
- Distilled water for cleaning wounds
- eye wash and eye bath

### 3.2.29 Accident and Incident Reporting

In the event of an incident or accident, the Principal Contractor must complete a Roche Accident/Incident Report form for submission to the Roche Project Manager. This is in addition to their own accident incident report that they are required to undertake as a responsible employer.

At the end of each month the Principal Contractor will report back to their Roche Project Manager the TRIR (Total Recordable Incident Rate). The Principal Contractor will use the following formula to calculate this figure;

TRIR (Total Recordable Incident Rate)

$$TCIR = N \times 200.000 / H$$

N = Number of recordable incidents

H = Total man-hours worked on project by all workers

An incident is defined as, any event resulting from an unplanned act that is contrary to health and safety standards and that resulted in a loss of time. By reporting all incidents Roche will be able to identify trends across their construction programs.

All accidents and incidents must be reported in line with requirements of the governing authorities for that country. All accidents and incidents must be reported to the Roche Project Manager as soon as possible following the event.

### 3.2.30 Personal Protective Equipment (PPE)

The principal contractor will ensure that all workers on the project have available to them PPE to protect them from hazards that they will be exposed to. This is a last line of defence in the hierarchy of risk control, the principal contractor will ensure the wearing of this equipment by their workers.

PPE will meet the standards of robustness and quality that are locally applicable e.g. UK BS EN. Where these do not exist, the principal contractor should obtain the PPE from a company that provides equipment compliant with EU conformity standards.

The basic PPE that shall be adopted by all people working on Roche construction sites include the following;

- Boots with steel toe caps and steel sole plate
- High visibility vests
- Gloves
- Hard hat

The principal contractor will make sure additional task specific PPE is available for tasks that have identified through risk assessments the requirement for it. This will include;

- Safety glasses / Goggles



- High cut resistance gloves
- Hearing protection

### 3.3 Environmental Management

This section identifies the arrangements that should be implemented to ensure there is no negative impact on the environment resulting from these works.

#### 3.3.1 Waste Management

Principal contractors will from the outset of the project consider means by which they can reduce, reuse and recycle the materials they are planning to use on the project. Where materials cannot be reused, waste materials should be segregated to ensure it is recycled into the correct waste streams either on or off site.

#### 3.3.2 Contaminated / Hazardous Waste

Manage wastes in accordance to procedures and regulations. Know how to properly handle and store hazardous wastes. Wastes and chemical containers, even when empty, may be removed from sites only by authorized individuals. Any materials being removed from site classified under local laws as hazardous must be removed with the necessary relevant controls in place. The principal contractor should obtain proof in the form of certification that contaminated or hazardous waste is being disposed of by a licenced handler and entering the correct waste stream.

#### 3.3.3 Substance Controls

The principal contractor will ensure that where they are storing fuels or other sources of contamination on site, they have suitable measures to protect from spillages. This includes the use of bunding which should allow for 110% the volume of the source and spill kits that are in close proximity with people trained in their use.

#### 3.3.4 Material Selection

All organic based materials selected for works (wood, papers) must be procured from responsible and sustainable manufacturers. No hazardous materials or banned products are to be specified for use in any Roche premises.

## Appendix A: Accident/Incident Report Form

Project Name			
About the person who had the incident			
Name			
Address			
Occupation			
About the person completing this form			
Name			
Address			
Occupation			
Date Reported			
About the First aider			
Name			
Employer			
Witnesses to the Incident/ Near Miss / Dangerous occurrence			
Witness Name		Witness Employer	
Witness 1			
Witness 2			
Witness 3			
About the Incident/ Near Miss / Dangerous occurrence			
Date		Time	
Location			

Was the injured person able to continue with their normal work following the incident/ treatment	Y/N	If "No" what action was taken	
<i>Is the incident reportable to local authorities or Health and Safety body (relevant to country)?</i>			
Reportable (under local legislation)?	Y / N	Report Ref No (if applicable):	
Investigation needed?	Y / N	Investigation Report Reference No:	
<b>Employers Confirmation</b>			
Name			
Signed			
Date			
Specific area on site			
Details of injury/loss/property damage/potential			
Details of what occurred (Give as much detail as possible)			
Details of any first aid treatment given? (Including materials used to treat the injured person)			

Please ensure a copy of the employer's full accident/incident report is forwarded to Roche SHE Officer/ Roche Project Manager and Technical Project manager.