



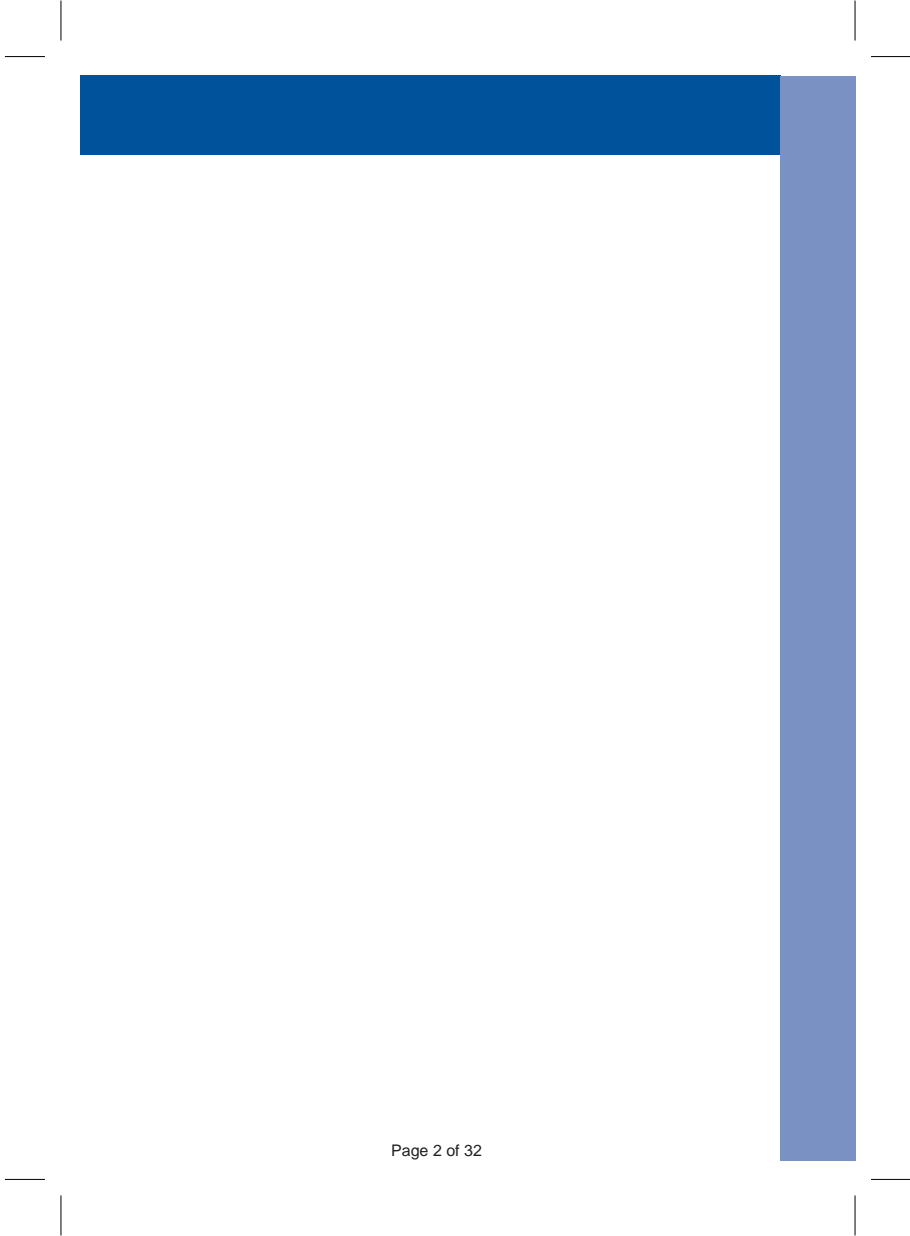
Sellafield Contractors Key EH&S Requirements





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Introduction

This booklet has been produced as a guide to the key requirements relating to EH&S within the Sellafield Management System.

It is aimed at Managers and first level Supervisors of all Contractors working at Sellafield. Further information can be obtained from the Management Standards, SSP's and SP's. The guide will also be useful for Superintending Officers.

The subjects covered within this booklet are not an exhaustive list of all EH&S related activities carried out on the Sellafield Site. As additional subjects are identified which would benefit from being included they will be produced and this booklet updated.

Whilst a number of the subjects within this booklet will cover activities which involve construction work it is important that where all construction work is being carried out that Regulations 26 to 44 within Part 4 of the Construction (Design and Management) Regulations 2007 are complied with. Briefly Part 4 covers the following:-

- Safe places of work (access, egress, maintenance of and sufficient working space).
- Good order and Site Security (cleanliness, security, sharp edges such as protruding nails etc).
- Stability of Structures (provision and maintenance of temporary supports etc).
- Demolition or dismantling (planning and recording before work starts).
- Explosives (storage, transport and use).
- Excavations (support, prevention of falls and the need for inspections).
- Cofferdams and caissons (design, construction, emergency arrangements, maintenance and inspection).
- Reports of Inspections (content, provision of, timescales and records specifically in relation to excavations, cofferdams and caissons).
- Energy distribution installations (controls to prevent danger and risk from overhead and underground services).
- Prevention of drowning (fall into water/liquid, rescue and transport on water).
- Traffic routes (pedestrian and traffic segregation).
- Vehicles (unintended movement, use, loading and unloading).
- Fire (prevention, escape, detection and fire fighting).
- Emergency Procedures (preparation, type and place of work, equipment, numbers of persons, substances and materials, routes and exits, communications and testing of effectiveness).
- Fresh air (provision, sufficiency and testing for effectiveness).
- Temperature and weather protection (indoor temperatures and protection from adverse weather).
- Lighting (provision, suitable and sufficient, affects on signs/signals, provision of secondary lighting).

Command, Control and Supervision

Under the Site Licence Sellafield Ltd (SL) has a requirement to apply appropriate Command, Control and Supervision arrangements to ensure work is carried out safely. This includes arrangements for the supply chain or Contractors.

Command is defined as the authority to ensure compliance with Site Licence Conditions, Discharge Authorisations and Safety Legislation. It is also the authority to take control of a situation that is believed to be non-compliant with the aforementioned standards e.g. stop work that is unsafe. For Contractor activities this role is discharged by a SL Superintending Officer (SO), and for all non-contracted work by an Operations Control Manager (OCM).

Control is defined as assuring appropriate arrangements are specified and implemented to permit work to proceed safely e.g. compliance with Management Standards, SSP's etc. For Contractor activities this role is discharged by a SL SO.

Supervision is defined as managing the appropriate arrangements to ensure they are implemented and complied with safely. For Contractor activities this role is discharged by the Company undertaking the work i.e. the Contractor.

When using this Booklet, please consider who should be undertaking the Command, Control and Supervision roles for the work you are monitoring. Further details on Command Control and Supervision arrangements for Suppliers and Contractors are available in SSP 8.02.

Nuclear Safety

Nuclear Safety at Sellafield is all about ensuring that the Nuclear Material Inventory of our Plants is intelligently contained & controlled at all times.

Do not confuse Radiological Safety with Nuclear Safety. Radiological Safety only deals with the management of personal dose uptake.

Q. What does Nuclear Safety mean to Contractor personnel?

A. Nuclear Integrity of build, achieved through correct configuration. This is ensuring that all work is carried out exactly to drawing, specified quality standards are adhered to and specifications/working practices are followed. The build must meet the design intent. Maintenance must be carried out to the specification, instruction and frequency. Contractor services must be provided to the correct quality, specification and time.

Individually, we must,

- Follow Method Statements & drawings accurately.
- Adhere to Safe Systems of Work.
- Ensure Hold Points/ Sign Offs and Inspection Check Lists are recognised and adhered to
- Understand our role in the team & work as part of that team.
- Use Behavioural/ Human Performance tools. Questioning Attitude, STAR.
- Not be afraid to ask questions or challenge personnel.

Older Plants

- Understand the Nuclear Safety hazards in your work area, e.g. fragile pipework or instrumentation etc...how does your work affect them?
- Again use your Behavioural/ Human Performance tools. Questioning Attitude, STAR. Don't be afraid to ask questions or challenge personnel.
- Do not operate or maintain equipment unless you are authorised to do so.
- Report any damage to plant, or change in plant conditions to the SSC/STL

Q. Why should I care?

A. So you can take pride in your workmanship & actions, be safe in the knowledge you are doing your best to protect your family and friends by contributing to safety at Sellafield, and know that you are helping to safeguard the economy & future jobs in West Cumbria.

Person Organising Work & Risk Assessment

Under SSP 1.11 (Work Safety Planning) and SSP 1.12 (Safe Working at Sellafield) there is a requirement for an employee working for or on behalf of the Site Licence Company to take responsibility for the control of safety of work. For operational areas this person is known as the Person Organising Work (POW).

However, section 2.1.3 of SSP 1.12 permits the managers of projects, which have **no intervention with operational plant**, to establish appropriate alternative safe working arrangements. Amongst other things, this means the Project Manager may choose not to utilise the POW role and may implement other suitable arrangements which may involve the Contractor taking responsibility for the planning and organisation of work in his area. These arrangements need to be formalised so that all persons understand them and are aware of their responsibilities.

Whatever safe working arrangements the Project Manager implements they must include risk assessment. The risk assessment needs to be carried out by the best placed persons i.e. on projects, by the Contractor actually doing the task. If significant findings are brought to light such that they need to be recorded, then that Contractor must also fill in the Work Safety Planning (WSP) form (SSF 1.11_01A). If the Contractor doing the task is not the Main Contractor, the Main Contractor should then review the content of the WSP and sign to confirm his agreement. As the Site Licensee, Sellafield Limited will review the WSP and the SO (or their Nominated Representative) will sign in the guise of the POW, taking the responsibility for the formal approval of the WSP.

Managerial Responsibilities SSP 8.02.02 suite

Key Points

- Step 1** Contractors must produce and implement their own induction training course.
- Step 2** Managers/Supervisors must be trained in IOSH Managing Safely or equivalent. (see SR's 0716 & 0718).
- Step 3** Managers/Supervisors, trained in Work Safety Planning (WSP) and Work Control Authorisation (if relevant)?
- Step 4** Managers/Supervisors with safety responsibilities appointed (Using Form RE 4.340 for Contractors).
- Step 5** All personnel trained in IOSH Working Safely or alternatively relevant Safety Passport Scheme.
- Step 6** Who is the competent safety adviser or manager? Do Contractors have a sufficient number of competent safety persons available? (see SR0717).
- Step 7** Ensure risk assessments are undertaken. Ensure Work Safety Plan (WSP) produced where significant risks are identified.
- Step 8** Do doers know the standards that are required for the work and the control measures required? Are there lessons from events that can help? (see SR0719).
- Step 9** Are plans in place for foreseeable emergencies.
- Step 10** Are contents of WSPs explained to all on job?
- Step 11** Is lone working suitably addressed?
- Step 12** Is the safety of young persons considered and planned for.
- Step 13** Is there co-ordination between plants, projects, contractors or site overseeing bodies (e.g. security, roads, police, shift manager etc)?

Note:

- SR0716** is the SQEP Role Assessment Specification for Contractors Site Managers.
- SR0717** is the SQEP Role Assessment Specification for Contractors Safety Practitioners.
- SR0718** is the SQEP Role Assessment Specification for Contractors Supervisors.
- SR0719** is the SQEP Role Assessment Specification for Contractors Operatives.

First Aid and Emergency Response SSP 8.02.02, SP/SW 8.02.02/01

Key Points

Contractors must comply with SSP and associated documents.

- Step 1** Is a written First Aid Plan in place? Is it re-assessed and updated at least once every 3 months?
- Step 2** Do you have sufficient number of trained First Aiders? For each shift?
- Step 3** First Aiders should be easily identifiable by the rest of the workforce.
- Step 4** Are First Aid and emergency response details included in the site induction?
- Step 5** Do you have a sufficient number of First Aid stations? Are they easily identified?
- Step 6** Check that First Aid boxes/posts carry appropriate supplies for the injuries that are likely to be encountered.
- Step 7** Check that first aid boxes are regularly restocked.
- Step 8** Is adequate signage (RE 4.549) displayed detailing First Aid and Emergency Response information?
- Step 9** EMERGENCIES! Contact emergency services on ext. 222 or Seascale 28183.
- Step 10** Save time give clear information
- Name.
 - Nature of incident.
 - Exact location of incident.
 - Where ambulance will be met.
- Step 11** Before entering controlled areas get all wounds treated and covered at the site surgery.
- Step 12** Anyone who receives a wound or break to the skin whilst working in a controlled area must report immediately to the Health Physics office for monitoring and then to the nearest plant surgery for treatment (where the injury is significant the injured party should go directly to the nearest surgery). If they are subsequently sent to hospital they report back to the original plant surgery before re-entering the controlled area.

Reporting & Investigation of Events MSTD 53, SSP1.21, SP/SW 1.21.01/02

Key Points

Contractors must comply with SSP and associated documents

SOs are responsible for ensuring that all events associated with contracts under their control are reported through the Site Arrangements.

- Step 1** Are rules on reporting of events/accidents etc explained to all personnel?
- Step 2** Do all Contractors & subcontractor know where the Contractors Accident Book is kept & how it should be used?
- Step 3** When an event/accident occurs or is discovered it must be recorded on ATLAS (Analysing, Trending, Learning And Safety) Database (or where Atlas is not available via form SSF 1.21.01_01 (ERF)) – as soon as the event occurs or is discovered - via nominated person or your Superintending Officer. Information to include – when, where, what, who & any consequence that have been revealed.
Note - Events fall into a number of categories – e.g. Conventional (personal injury - accident book entries/ dropped loads), Environmental (a spillage of any quantity of oil/ fuel onto the ground), Security (unauthorised persons entering the Site) – this is not a definitive list.
- An event must be recorded when it occurs:
- Anywhere (on or off site) that involves or has the potential to involve an SL employee.
 - On a Sellafield managed Site & involves or has the potential to involve any personnel (e.g. SL, Contractors & visitors etc).
 - Outside a Sellafield Managed Site but is directly attributed to the Site (e.g. material falling off a wagon that has exited the site).
- Step 4** Sellafield Limited is responsible for confirming that an entry onto ATLAS has been made (e.g. via SO/NR etc) and whether an IER is required (i.e. via Convening Authority/Site Shift Manager).
- Step 5** The scene of the injury/event must be left undisturbed until the SO & relevant Safety Dept have given their permission for work to continue.
- Step 6** If a Site Inquiry is convened the Contractors personnel must co-operate fully with, and present any facts, documents & witnesses asked for by the Inquiry team.
- Step 7** The Contractor must contact the HSE in the event of any injury which is reportable under RIDDOR. Where an event is also a Dangerous Occurrence under RIDDOR the report to the HSE must be made by Sellafield Limited (as the company in control of the premises) – not the Contractor.

Fire Precautions

MSTD 43, SSP1.33, SP/SW 1.33

Key Points

Contractors shall meet the standard, plus any additional SSP 1.33 requirements specified by the SO, through their own management system arrangements.
SSF 01.33_16 Appointment of Responsible Person for Fire Safety

- Step 1** A 'Responsible Person' shall be appointed to manage all aspects of fire safety.
- Step 2** A Fire Risk Assessment shall be completed by an appointed competent person.
- Step 3** A Fire Safety Plan shall be completed by The Responsible Person.
- Step 4** Suitable arrangements for evacuation of persons from premises shall be established, and checked at regular intervals.
- Step 5** Hot Work shall only be carried out when a Work Control Authorisation (WCA) has been raised and approved by Superintending Officer (SO).
- Step 6** Suitable and sufficient fire fighting equipment, fire detectors alarms, signs and lighting shall be provided and effectively maintained.
- Step 7** Flammable Liquids/LPG etc shall be stored in a safe designated storage area, adequate control measures shall be in place when being used.
- Step 8** All access routes, emergency exits and assembly points shall be adequately signed and well maintained.
- Step 9** All personnel entering the area or building shall be instructed on the emergency procedures.

Work at Heights MSTD 31, SSP 1.11.07, SP/SW 1.11.07/01

Key Points

Contractors must comply with SSP and associated documents

- Step 1** Are you competent to plan, supervise or do this work?
- Have you talked to a Work at Height Safety Advisor?
- Step 2** Can the work be done from a safe place without any work equipment?
- Step 3** Does a scaffold with a safe working platform have to be used?
- Have you considered the subsequent risk to scaffolders?
 - Have alternatives been considered?
- Step 4** Can a Mobile Elevating Work Platform or a Temporary Cradle be used?
- Step 5** Are the erectors, users and doers competent for the work?
- Step 7** Can a Mobile Tower Scaffold be used, instead of ladders or stepladders?
- Step 8** Can Podium type steps be used instead of ladders or stepladders?
- Step 9** Is the work of very short duration, and suitable to be undertaken from stepladder or ladder?
- Are the steps and ladders tagged/inspected.
 - Can you hold the ladder and undertake the work?
 - Angle correct, tied at top, secure at base, stabiliser?
- Step 10** If a harness is to be used, is it restraint or fall arrest?
- Are anchor points identified and appropriate.
 - Harness user trained and pre-use check done.
 - Thorough inspection and tagged.
 - Is a rescue plan in place.
- Step 11** Is the area below effectively barriered off and marked as a danger zone?
- Step 12** Has the above work equipment been inspected by a competent person and at suitable intervals?
- Step 13** Have you checked your work area, platform or work equipment before you commence – are you satisfied it is ok to use and continue? You should do this every time you start work at height – your life could depend on it!

Work at Height – Scaffolding MSTD 31, SSP 1.11.07, SP/SW 1.11.07/01

Key Points

Contractors must comply with SSP and associated documents

- Step 1** Is scaffolding the most suitable method for work at height?
- Have you discussed selection with Work at Height Safety Advisor?
- Step 2** Is the scaffold designed where appropriate?
- Built to NASC TG20 guidance?
 - SSF 1.11.07_01 completed and available?
- Step 3** Are the scaffolders suitably trained/competent?
- Working to SG:04 Guidance?
 - Harness/Anchor points?
- Step 4** Tagged as complete and inspected.
- If not, is access removed/restricted?
- Step 5** Has the scaffold been handed over formally?
- Scaffold inspection initiated?
- Step 6** Pre-fabricated aluminium towers advance guard system in use?
- PASMA training /manufacturers instructions available/used?
- Step 7** Is the most appropriate method of lifting of scaffold components used?
- Bags or containers must be used for lifting and lowering fittings
- Step 8** Are the danger areas below barriered off?
- Suitable barriers/signs?
- Step 9** Is the most appropriate access in the scaffold specified? (to the following hierarchy)
- Proprietary stairs.
 - Internal ladder access.
 - External ladder access towers.
 - External ladder access with Gate & Chicanes etc.
- Step 10** Final checks need to include
- Platforms fully boarded.
 - Handrails/toe boards and brick guards in place.
 - Keep Checking.....

Work at Height - Steel Erection

MSTD 31, SSP 1.11.07, SP/SW 1.11.07/01

Key Points

Contractors must comply with SSP and associated documents

- Step 1** Assemble and bolt up at ground level wherever possible.
- Step 2** Use mechanical aids to reduce need for manual handling.
- Step 3** Use mechanical aids (other than podgers) to locate bolts with holes on steelwork or when locating columns.
- Step 4** Where access on the steel is necessary (and all other methods of access are impractical):
- Advance guard type handrails.
 - Anchor points must be identified.
 - The work method must be written.
 - A work at height safety adviser must have been consulted.
 - Rescue plans must be written.
- Step 5** All work areas below must be barriered off to prevent unauthorised access.
- Step 6** Provide toolbelts, bags and containers.
- Step 7** All users of MEWPS or other access equipment must be competent.
- Step 8** MEWPS and other access equipment must be tidy, no loose materials, tools etc.
- Step 9** All MEWP users must use a restraint harness and it must be connected. Only when Step 4 is identified can fall arrest lanyards be used.
- Step 10** This is high risk work and must be checked constantly, by managers, supervisors and operatives.

Work at Height - Safe Use of MEWPS MSTD 31, SSP 1.11.07, SP/SW1.11.07/01

Key Points

Contractor must comply with SSP and associated documents

- Step 1** Ensure the job is properly planned.
- Step 2** Operators must be suitably trained and competent.
- Step 3** Follow the manufacturers instructions.
- Step 4** Only connect to identified harness anchor points (not handrails).
- Step 5** Operators must be clipped on using restraint lanyards at all times in boom type MEWPS and when travelling, raising or lowering in scissor type MEWPS.
- Step 6** Scissor lift MEWPS must have effective guards fitted to the base or suitable barriers to prevent contact with dangerous parts.
- Step 7** All MEWP operations must have effective signs, barriers and traffic control systems in place to prevent vehicle collision and protect pedestrians from collision / falling objects.
- Step 8** Ensure suitable ground conditions for MEWP work, and where outriggers or stabilizers are provided they must always be fully extended when in use.
- Step 9** All MEWP's should be marked with the Safe Working Load (SWL) and the permitted number of persons.
- Step 10** The total weight of persons, materials and equipment must not exceed the SWL. Loads must be carried within the confines of the work platform and materials must not be carried on the guard rails. Do not allow build up of redundant materials and equipment in the basket.
- Step 11** SFF 1.11.07-02 MEWP Proposal Form must be completed before any articulated or boom type MEWP is used.

Plant Equipment and Machinery MSTD 016, SSP 1.32, SSP 1.32.02, SP/SW/1.32/01

Key Points

Contractors must comply with SSP and associated documents.

Have you carried out a risk assessment?

Are you using the correct plant item or are you making do because it is all that is available?

- Step 1** Is the plant, equipment or machine suitable for the job & have you considered the environment it is to be used in?
- Step 2** Is it maintained and inspected as per the manufacturer's specification?
- Use SSF 1.32.01 and 1.32.03.
- Step 3** Are you supplying plant or equipment to a Contractor?
- SO must ensure the supply is justified and SSF 1.32.02 is completed.
- Step 4** Are there any dangerous parts and are they guarded to the correct standard? Do you need competent advice on the standard required? Have you consulted your safety advisor/manager?
- Step 5** Are the controls clearly marked with their function? Do all your workers understand the controls? E.g. other nationalities.
- Step 6** Left unattended? Then switch off, secure and isolate (remove keys).
- Step 7** Is there a legible copy of the manufacturer's spec available. Have you been provided with adequate training, information and instruction?
- Step 8** Tool vaults - fitted with dampers and locking struts, all in working order.
- Step 9** Seat belts, lights, protection systems and emergency braking systems working.
- Step 10** Keep checking, any doubts contact your safety advisor or OU lead advisor.

Safe Use of Vehicles and Roads On and Off Site MSTD 029, SSP 1.11.05

Key Points

Contractors shall meet the requirements of this standard through their own management system arrangements

Have you carried out a risk assessment?

- Step 1** Do you have a traffic management plan?
- Step 2** Do you have a safe delivery plan? Does it cover the entire route from main site entry to end location?
- Step 3** Is there a one way system in operation on your site?
- Step 4** Are pedestrians and vehicles segregated?
- Step 5** Are the drivers competent and trained to the correct level?
- Step 6** Ensure a banksman is used for all reversing manoeuvres.
- Step 7** Are all personnel aware of the site, compound and construction site speed limits?
Are appropriate signs posted?
- Step 8** Ensure all vehicles /plant are safe for use including: maintenance, periodic inspections, operator checks etc are carried out.
- Step 9** Is SP/SW 1.11.05/02 'Safety Instructions to Haulage Companies, Delivery companies and Supply Companies' provided to haulage, delivery and supply companies?

Hazardous Substances

MSTD 028, SSP 1.46, SP/SW 1.46/01

Key Points

Contractor must comply with SSP and associated documents

- Step 1** Contractors must appoint a Hazardous Substances Supervisor (HSS), they must be nominated on form RE 4.340 and must have passed IOSH module U91592 Safe Management of Hazardous Substances.
- Step 2** Has a hazardous substance inventory been collated by HSS?
- Step 2** Has a COSHH risk assessment been completed by HSS for substances which pose a significant risk to health? Are the control measures implemented? Is the assessment periodically reviewed?
- Step 3** Are Material Safety Data Sheets available for all substances, even those which pose a trivial risk to health?
- Step 4** Are suitable storage arrangements in place for substances? Are properly labelled containers used? Is the amount of substance used at the workface controlled?
- Step 5** Ventilation measures should be provided, blowing fresh air and/or extraction systems where practicable.
- Step 6** Atmospheric monitoring should be provided, and maintained.
- Step 7** Is information, instruction and training provided to those at risk from hazardous substances?
- Step 8** Is health surveillance provided for those at risk?
- Step 9** Is suitable PPE provided and maintained?

Excavations

MSTD 034, SSP1.11.06

Key Points

Contractors must comply with SSP and associated documents

RE 4.308 Application to Excavate now SSF1.11.06-01

RE 4.256 Permission to Excavate now SSF 1.11.06-02

- Step 1** Completed form SSF 1.11.06-01 Application to Excavate received. Complete form SSF 1.11.06-02 Permission to Excavate and issue.
- Step 2** Have all radiological survey steps been taken and permission advice followed.
- Step 3** Complete Risk Assessment followed by Work Safety Plan that includes drawings identifying known services in the area.
- Step 4** The employer must ensure trained competent person carries out CAT scan (or similar) and clearly identifies services in the excavation area. SO to ensure the employer appoints appropriate Competent Person to manage the excavation.
- Step 5** Excavations affecting pedestrians or traffic must have effective Traffic and Pedestrian Management System
- Step 6** Isolate live services. SO to obtain written proof of isolation.
- Step 7** Excavation must be appropriately battered, benched or supported to prevent collapse.
- Step 8** Erect suitable edge protection, to prevent falls of people, machines or material into excavation. Crowd barriers and Heras fencing are not an edge protection, but when set back from the edge (minimum of 1m depending on location and what it is being used for) are effective guards, but access must be prevented between fence and edge.
- Step 9** Ensure suitable access and egress, e.g. tied and footed ladder, scaffold staircase, steps cut into batter.
- Step 10** Erect suitable barriers to prevent vehicles driving in e.g. timber / concrete baulks, earth berm (care must be taken not to surcharge edge of excavation).
- Step 11** Hazards within the excavation e.g. sudden flooding, oxygen depletion, presence of gases and vapours, caused by ground conditions, work within excavation or operations adjacent to excavation may lead to the excavation becoming a confined space (see Confined space).
- Step 12** Complete and display excavation inspection tag, at the start of each work period.

Lifting Operations SSI 30

Key Points

Contractors must comply with SSI

- Step 1** Check proprietary lifting devices available and being used (e.g. lifting beams, plate clamps etc).
- Step 2** Check copy of manufacturers spec available & being followed.
- Step 3** Check current cert of thorough examination available & in date.
- Step 4** Check equipment/accessories are marked (tagged) with:
- Your company name/logo.
 - The safe working load.
 - A unique id mark/number.
 - Not to be used after date.
- Step 5** Check lifting points have been identified.
- Step 6** Is load stable? (i.e. centre of gravity below lowest points of attachments).
- Step 7** Sharp edges on load? Is proprietary packing or protective sleeves being used?
- Step 8** Equipment used for lifting persons? - is it marked and inspected as such?
- Step 9** Are chainblocks vertical above the load? Are the runway beams fitted with robust and large enough end stops?
- Step 10** Have you addressed all this in the Work Safety Plan and does it include de-rigging the lift?
- Step 11** Have danger zones been identified and are they clear, are personnel clear of the load? Are tag lines necessary?
- Step 12** Keep checking.

Mobile Cranes SSI 28

Key Points

Contractors must comply with SSI

- Step 1** Are you a contractor? RE 4.545 completed and issued.
- Step 2** Is there a legible copy of manufacturer's spec. available.
- Step 3** Have you checked the duty chart (is it the correct one?).
- Step 4** Have you checked the Cert of Thorough Examination?
- Step 5** Is the lifting equipment tag completed and displayed?
- Step 6** Check the RCI/RCL effective.
- Step 7** Is the crane on firm ground?
- Step 8** Are outriggers fully deployed and is the crane level?
- Step 9** Check the pads/mats in place under outriggers.
- Step 10** Check all wheels are clear of ground.
- Step 11** Is there safe access and egress on/off the crane.
- Step 12** Are all the weights of the items to be lifted known?
- Step 13** Are trained banksman in attendance.
- Step 14** HIABS - trained operator, effective interlock devices fitted and working on outriggers.
- Step 15** Keep checking.

Confined Spaces Management MSTD 25, SSP 1.12.02, SP/SW1.12.02_01

Key Points

Contractors must comply with SSP and associated documents

- Step 1** In consultation with a qualified Confined Space Supervisor decide if the area is a confined space.
- Step 2** If possible carry out work without need to access confined space (a space that is confined and has a specified risk).
- Step 3** If the area is a confined space use checklist SSF 1.12.02_01 to assist in preparing the WSP (Work Safety Plan). The checklist contains points such as
- Securing the confined space, access control & tagged.
 - Isolation.
 - Cleaning.
 - Testing.
 - Monitoring.
 - Ventilation.
 - Fire and chemical controls.
 - Training.
 - Emergency procedures.
- Step 4** Prepare WSP in accordance with results of the checklist, Confined Space Supervisor and Safety Advisor advice.
- Step 5** Ensure all persons entering the confined space have completed the relevant site courses on Confined spaces for Managers/Supervisors and operatives.
- Step 6** Keep checking.

Vibration

MSTD 33, SSP 1.43, SP/SW 1.43.01

Key Points

Contractors shall meet the requirements of this standard through their own management system arrangements

- Step 1** How is exposure to hand-arm and whole-body vibration managed and controlled?
- Step 2** Is there a robust system in place to record usage of vibrating equipment? Do users know what the system is?
- Step 3** Are competent persons appointed to manage the risks associated with exposure to vibration?
- Step 4** Are HAVS Risk Assessment, followed by Work Safety Plan for significant risks, completed?
- Step 5** Vibrating equipment must be assessed and assigned a trigger time.
- Step 6** Trigger time and vibrating magnitude should be displayed on the equipment.
- Step 7** Have personnel been trained in the use of HAVS control measures and trained how to recognise the symptoms of HAVS?
- Step 8** Is health surveillance provided for at risk personnel?
- Step 9** Is suitable PPE provided to reduce effects of HAVS.

Management and Control of Exposure to Noise MSTD 032, SSP 1.48, SP/SW 1.48.01

Key Points

Contractors shall meet the requirements of this standard through their own management system arrangements

- Step 1** Have noise assessments been carried out?
- Step 2** Can you remove, reduce or control the noise exposure?
- Step 3** Is all the equipment properly maintained?
- Step 4** Are you switching off noisy plant when not in use?
- Step 5** Has adequate and suitable hearing protection been provided? Is it being used and stored correctly?
- Step 6** Have you been trained/instructed on the correct use of PPE.
- Step 7** Are hearing protection zones marked?
- Step 8** Is noisy machinery, plant and equipment marked?
- Step 9** Keep monitoring, maintaining and checking. If in doubt ASK.

Management of Electrical Work

MSTD 039, SSP 1.15, SP/SW/1.15/01, HS(R)25, BS7671

Key Points

Contractors must comply with the SSP and associated documents.

- Step 1** All Contractors who use electrical equipment must appoint one or more managers or supervisors (or a competent organisation) to ensure that the Electrical Safety requirements are met.
- Step 2** All Contractors whose employees are carrying out electrical work or using electrical equipment will be provided with copies of SP/SW/1.15/01 ("The Red Book").
- Step 3** Where a contractor is responsible for the safety of his own electrical supplies he must appoint one or more Authorised Persons in accordance with HS(R)25 and SP/SW/1.15/01. Companies' authorised personnel are appointed in accordance with their company's procedures. They should be named in writing to SL (SL reserve the right to vet and approve the competence and authority of them).
- Step 4** Personnel who use electrical equipment must be given basic training so that they know how to visually check the equipment they are using.
- Step 5** Any person carrying out electrical work on equipment which is connected to the distribution system must be issued with, and trained to use, an approved voltage indicating device.
- Step 6** Any person working on an exposed conductor which has been or could be made live must confirm that the conductor is isolated then prove the conductor dead using an approved voltage indicating device before commencing work.
- Step 7** Working on or near live conductors ("Live Working") is not permitted unless specifically approved by a SL Senior Authorised Person (electrical).
- Step 8** Electrical isolations by one person to enable another to work safely on plant or equipment must be controlled and recorded using a suitable Safe System of Work.

Management of Welding

MSTD 043, MSTD 16, SP/37, SP/62

Key Points

Contractors must comply with SSP and associated documents.

- Step 1** All persons using equipment must be adequately trained in the correct use of the equipment & safety procedures.
- Step 2** Look for all signs of leaks, wear and damage when using gas welding equipment and purging gases such as Argon. Note: Sellafield Site discourages the use of acetylene cylinders. Propane is the preferred option.
- Step 3** Ensure correct PPE is worn. Flame resistant overalls (BS-EN533), protective gloves and welding mask.
- Step 4** Keep work areas clean & free from combustible materials, minimise slips, trips, falls hazards. Use, maintain & store your protective equipment in accordance with instructions.
- Step 5** All welding areas (indoors) must be adequately ventilated. Local Extraction Vent, Extracted Workbench or Extraction booth, dependant on welding type and material. Extraction systems must be examined for performance every 14 months (6 months for non-ferrous materials) by competent vent engineer (HSG 54).
- Step 6** When using gases, as a minimum, all personnel must have seen the video "Safe Under Pressure" produced by BOC.
- Step 7** Ensure escape routes are maintained at all times and that sufficient fire extinguishers are at hand and maintained within the welding area. Ensure a fire watcher is at hand when carrying out welding operations on plant and temporary areas such as construction sites.
- Step 8** At the end of each campaign and during breaks etc, all torches must be extinguished and regulators must be turned off. Equipment must be stored correctly and hoses coiled up.
- Step 9** Wash hands before eating, drinking or using the lavatory. Never use solvents or concentrated cleaning products on your hands & use skin creams provided as instructed.

Further information;

HSG202 HSE Books 2000 ISBN 0 7176 1793 9 General Ventilation in the Workplace.

HSG139 HSE Books 1997 ISBN 0 7176 0680 5 Safe Use of Compressed Gasses in Welding, Flame Cutting & Allied Processes.

Rebar Installation

SSP 1.70, SP/SW/1.70/03

Key Points

Contractors must comply with SSP and associated documents

- Step 1** Delivery, Storage, Transport, Lifting Operations
- Loads well stacked to allow safe unloading/lifting.
 - Bundles segregated + weight marked?
 - If access to trailer required, is the work at height risk controlled?
 - Are loads stored on battens to allow lifting?
 - Is storage organised to allow easy access to priority bundles?
- Step 2** Handling.
- Consider length, weight, shape, access and distance
 - Where possible, use mechanical handling.
- Step 3** Consider layout of bending yard.
- Have cutting and bending operations been risk assessed?
 - Are operators trained and competent?
 - Is access to yard controlled?
 - Reduce manual handling, stretching and provide protection to operators where possible.
- Step 4** Is access restricted/controlled?
- Are suitable + sufficient walkways provided to allow access to workfaces?
 - Access/egress onto mat during installation and post installation?
- Step 5** Is temporary stability considered before, during and after fixing?
- Displacement of rebars/stored energy
 - All changes formally agreed?
- Step 6** Are Rescue + Emergency Arrangements in place?
- Detailed.
 - Promoted.
 - Trialled.
 - Periodically tested.

Controlled & Supervised Area Work MSTD 10, 11, 12 and SSP 1.03, SSP 1.04, SSP1.05 & associated documents

Key Points

Contractors must comply with the SSP and associated documents.

- Step 1** Persons working with ionising radiation will be designated as Classified Persons (CP's) or Monitored Workers (MW's). CP's must complete training course S0392E and MW's must complete training course S0391E.
- Step 2** Annual health reviews & medicals required for CP's but not for MW's.
- Step 3** Instead of refresher training, carry out an annual review of designation training etc. every 3 years SQEP assessments must be carried out by a competent person on CP's & MW's (SR0686 for CP's SR0687 for MW's).
- Step 4** CP's & MW's are responsible for reporting changes in their medical fitness which may affect their ability to work with radiation e.g. respiratory conditions, skin conditions, pregnancy.
- Step 5** CP's & MW's should undertake local building/area inductions.
- Step 6** Local Rules must be clearly displayed and explained to personnel working in controlled/supervised areas.
- Step 7** RPA must be known and appointed (annually by the contractor). RPS's must be appointed (by Sellafield Limited), named on Local Rules and consulted with during planning of the work. A Dose Manager must be nominated within the Contractor organisation.
- Step 8** Nuclear safety issues associated with the controlled/supervised area should be known and understood by all personnel. Is this checked?
- Step 9** Requirements on dealing with wounds must be clear to all personnel. Is this checked?
- Step 10** Periodic checks should be made to ensure Film Badges, EPD's, PAS's etc are worn correctly.
- Step 11** Lost and/or damaged film badges should be reported ASAP by completing SSF 1.05.01_03.
- Step 12** The appropriateness of any routine biological sampling regime for CPs should be reviewed with the RPA (e.g. entries into uranium buildings etc may change the required type and frequency of sampling).
- Step 13** Periodic checks should be made to ensure barrier procedures are followed.

Safe Management of the Environment MSTD 45, SP/15 (part of SSP8.02.02 suite)

Key Points

- Step 1** Keep all areas clean and tidy.
- Step 2** Do you have plans of local drainage available?
- Step 3** Do your site vehicles have spill kits available?
- Step 4** Are tanks and containers marked with contents, volume and emergency procedures?
- Step 5** Are skips and containers suitably covered to stop waste being blown out and to stop access by vermin, birds etc? Clearly marked to indicate what materials they are used for?
- Step 6** Are bunds free of rubbish and debris and rain water?
- Step 7** Are pumps, valves, pipe work, hoses, etc within the bund and kept locked when not in use?
- Step 8** Are bowsers provided with spill kits and labelled with contents, user or plant owner and ID number?
- Step 9** Are drums, cans etc:
- Stored in banded area which is suitably weather protected?
 - Clearly labelled with contents and associated hazards?
- Step 10** Is mobile plant:
- Positioned away from drains when parked?
 - Provided with drip trays?
 - Provided with spill kits?
- Step 11** Are you checking and monitoring?

Questioning Attitude – What's the worst thing that can happen?

Questioning Attitude is a human performance tool to encourage an attitude where a person make a proactive attempt to fully understand the significance & nature of the work situation so that the planning, judgement , decision making & consequence of actions are appropriate for the task in hand. Use this tool for any on the job activity whether it involves managing, operating, maintaining, engineering or providing support to these functions.

Key Steps:

- Step 1** Before you begin a task consider whether you feel 'Too sure' or 'Too confident'.
- Step 2** Try to estimate where you are on the Questioning Attitude meter.
- Step 3** Identify what you feel are the causes of this & what you can do to develop a healthy unease.



The following are every day Error Traps:

- Time Pressure (in a hurry, rushing).
- High workload (lots of jobs to do, some at the same time).
- Same job over & over again.
- Unclear who's doing what.
- Information given not clear.
- Distractions/interruptions (too many other people around).
- Equipment not as expected (wrong tools).
- Only a single defence barrier left from preventing this job going badly wrong.
- Bad lighting, noisy, too hot or cold.
- Everything looks the same, could cause confusion.
- New job not done before, feel unsure about it, not properly trained.
- Complacent, switched off, done it loads of times.
- Long shift, feeling tired.
- Not aware of all the hazards, think industrial as well as radiological hazards.
- Gut feeling telling you there's something not quite right.
- You're making assumptions.

Pre Job Brief – Discuss the critical stages before carrying out the task

Pre Job Briefs (PJB) are a key tool in preparing for a task to allow everyone involved aware of the potential hazards & to fully consider what the task involves.

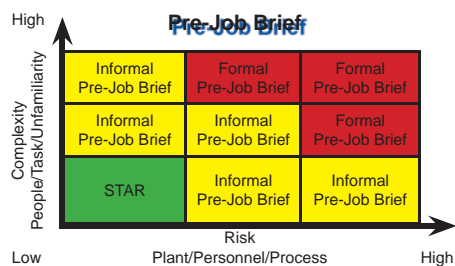
PJB's should be conducted as a minimum for all tasks involved in the High Hazard Assessment. In addition pre job briefs can also be used before the start of any non routine work safety critical work where change is involved.

Key Steps:

- Step 1** POW reviews the task before the PJB to fully consider what is involved i.e. the critical steps.
- Step 2** The PJB can take place at the direct workface or if necessary in an area put aside to allow concentration, no distractions. The duration of the PJB will depend on the complexity of the task & as a minimum address the following:
- Scope of work.
 - Individual Roles & responsibilities.
 - Safety.
 - Instructions.
 - Problems (real or potential).
- Step 3** The team should be encouraged to share their experiences & knowledgeable experts who may not be directly involved but could add value should be consulted.
- Step 4** Learning from previous jobs or other areas may need to be considered, a request for relevant info should be made to your local OEF Coordinator.

The following key questions can be used to encourage discussion during the PJB:

1. Have we done this job before? (If so when & do we know all the task & hazards? Have we encountered problems in the past).
2. What are the critical steps?
3. What mistakes might be made & who do we contact if something goes wrong? (contingency plans).
4. What's the worst thing that could happen?
5. What kind of defences should the team consider & review?



Post Job Review – Share best practice & learn from experience.

Post Job Reviews (PJR) record the experience & learning of the team involved in the task. The learning can be fed back into future pre job briefs for the same or similar task.

PJR's should be carried out on completion of tasks identified in the High Hazard Assessment. In addition a PJR can be used after the completion of any non-routine work or safety critical work where change is involved.

Key Steps:

Step 1 Gather everyone involved in the task together. Supervisors do not need to lead the PJR as the focus should be for team involvement. Any member of the team can lead the review & feed the learning back to the Supervisor.

The time taken to discuss & review the task will be dependant on the complexity of the task/ activity carried out.

Step 2 Use a selection of the following key questions to aid the discussion.

- Was the task completed with the expected results/ why were the results what they were?
- Did the job have to be stopped/ if so why?
- Were there any surprises/if so what?
- Were the procedure/work packages accurate?
- Is this the way the task will be performed in the future/if so why?
- Did anything go wrong/ if so what?
- Was there adequate planning?
- Was the PJB adequate?
- Was the training for the task effective?
- Were the correct tools & PPE available?
- Were there any lessons learnt?
- What would be different next time?

Step 3 Record any learning & feed it back to your OEF Coordinator.

STAR – Stop, Think, Act, Review

STAR is a Human Performance tool intended to allow an individual to consciously & deliberately assess & rehearse intended actions & the expected response before performing a task. Similar to a conducting a 1 minute risk assessment.

Use this tool before starting a task to ensure you consider the potential for accidents & to increase your risk perception.

Key Steps:

Step 1 STOP

- Cease moving (this simple act frees up valuable working memory).
- Consider the intended action (prepare you mind).
- Assess your level of Questioning Attitude (can you achieve a healthy unease).
- Eliminate distractions.
- Check you are working on the correct equipment, cross check labels/ procedure/ instructions.

Step 2 THINK

- Do I have the authority to do this task?
- Is now the best time to complete the task?
- Have I informed everyone necessary?
- Do I need any other information, materials, and equipment?
- How can I stop, recover or mitigate if things start to go wrong?

Step 3 ACT

- Rehearse the action (get your mind into the zone).
- Look at the component & physically touch (do not activate it).
- Check again you are on the correct equipment.
- Perform the required action.

Step 4 REVIEW

- Is the actual result as intended? – If not apply necessary contingency plan.
- Promptly complete all records, documentation.
- Report any non-conformities to relevant authority.
- Debrief all others – could anything have been done better?
- If there is a risk of a latent error (e.g. equipment left in the wrong position causing a problem later) – check all of your actions again as if you were a second person carrying out an audit of your work.





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