

# Contractor Safety and Environmental Regulations (Generating Stations)

#### Instructions for Use:

- 1. These regulations apply to all locations
- 2. Read this document carefully
- 3. Fill in the Vendor Information Request Form at the front of this document when submitting Tender or Quotation
- 4. Submit the Documentation requested in Section 1.2
- 5. On Award of Contract complete Contractor Declaration Form at the back of this document and upload to the online induction system.

Approved by

Joe Scally, GT EHS Manager 25/07/2023

# Contents

1.	Intro	oduction	7
	1.1	Issue of Contractor Regulations	7
	1.2	Competency Assessment	8
2.	Saf	e System of Work	8
	2.1	Work Controller	8
	2.2	Permit Holder	8
	2.3	Members of the Working Party	9
	2.4	Transfer of Duties by the Permit Holder	9
	2.5	Permit	10
	2.6	Cancelling a Permit	10
	2.7	ROSH/Testing Permit	11
	2.8	Isolation, Locks and Tags	11
	2.9	Interference with Plant	11
	2.10	Access restrictions	11
	2.11	Work in the Vicinity of Electrical Equipment	11
	2.12	Control of Sub-contractors	12
	2.13	Control Of Major Accident Hazards (COMAH/Seveso)	12
3.	Cor	ntractor Senior Management Leadership	13
4.	Indu	uction Process, Fitness & Competence to Work	13
	4.1	Contractor Staff Registration	13
	4.2	Induction Safety and Environmental Training	13
	4.3	Contractor Site Access Pass	13
	4.4	Competence and Fitness for Work	13
	4.5	Tool-box Talks	14
5.	Met	thod Statements and Risk Assessments	14
	5.1	Risk Assessments	14
	5.2	Method Statements	
6.	Hea	alth and Safety Training	15
	6.1	Safety Awareness Scheme (SOLAS Safe Pass cards) ROI	15
	6.2	SOLAS Construction Skills Certification Scheme (CSCS) and Training requirements ROI .	15
7.	Saf	ety and Environmental Auditing	16
8.	Inju	ries, Incidents and Emergencies	17
	8.1	Reporting and Investigation of Injuries and Incidents	17
	8.2	First Aid	18

8.3	Contractor's Emergency Procedures	18
9. He	alth, Safety and Welfare at work (construction) regulations Rol	19
9.1	Construction Work	19
9.2	Roles and appointments	19
9.3	Design Safety	19
9.4	Safety File	20
10. Co	nstruction (Design and Management) Regulations UK	20
11. Ge	neral requirements	21
11.1	Safety Management System (e.g. OHSAS 18001, ISO 45001)	21
11.2	ISO 14001 Environmental Management System (EMS)	21
11.3	ESB Safety Statement	21
11.4	Contractor Safety Statement/Health and Safety Policy	21
11.5	Provision of Safety/Environment in Tender Price	22
11.6	Alcohol and Drugs	22
11.7	Safety and Environmental Violations	22
11.8	Young Persons, Pregnant women and Sensitive Risk Groups	22
11.9	Safety Officer	23
11.10	Environmental Officer	23
11.11	Movement of Vehicles	23
11.12	Personal Protective Equipment	23
11.13	B Housekeeping and waste disposal	25
11.14	Equipment for Protection of the Environment	25
11.15	5 Welfare arrangements	25
11.16	S Temporary accommodation and storage facilities	25
12. Wo	orking Environment	26
12.1	Work in High Noise Areas	26
12.2	Ensuring a safe atmosphere	26
12.3	Work in Areas of Inadequate Lighting	26
13. Sat	fety of Work Equipment	27
13.1	Inspection and Maintenance of Work Equipment	27
13.2	Portable Electrical equipment	27
13.3	Lifting Equipment	27
	Use of ESB Work Equipment	
14. Lift	ing Operations	28
15. Co	nfined Spaces	28
16 Wo	ork at Height	20

16.1	Ladders	29
16.2	Scaffolds	31
16.3	Mobile Tower Scaffolds	32
16.4	Suspended Access Equipment	33
7. Hot	Work	33
17.1	Hot Work Controls Document	33
17.2	Avoidance of Hot Work	33
17.3	Nearby Combustible Substances	33
17.4	Gaps in Flooring	33
17.5	Metal Bins	33
17.6	Solvents	34
17.7	Firefighting Equipment	34
17.8	Two Persons Present	34
17.9	Plant Containing Combustible Material	34
17.10	Follow-up Inspections	34
17.11	Gas welding and Cutting Equipment	34
17.12	Electrical welding equipment	35
17.13	Tarpaulins and temporary flexible sheeting	35
8. Dig	ging/Excavations	36
9. Woı	rk with Hazardous Substances	37
20. REA	ACH Compliance	38
21. Woı	rk with Asbestos	38
21.1	Low Risk Asbestos Removal	39
21.2	Specialist Asbestos Removal Operations	39
22. Woı	rk with Refractory Ceramic Fibre, Vitreous Fibre Insulation and similar Products	39
22.1	Work with Vitreous Fibre Insulation and Similar Products	40
23. Woı	rk in Explosive Atmospheres (ATEX) Risk Areas	40
24. Rac	diography	42
25. Woı	rk on or adjacent to water	42
25.1	Work Near an unguarded Waters Edge	42
25.2	Work on Water	42
26. Divi	ng Operations	43
27. Par	ticularly Environmentally Hazardous Work Activities	44
27.1	Work On or Adjacent to Water	44
27.2	Work on Oil or Chemical Installations	44
27.3	Air Heater and Roiler Washing	44

27.4	Work on Drains	. 44
27.5	Working with Ash	. 44

Energy for generations			ESB Reference:				
			Vendor Information Request Form				
Contractor/Vendor:	:						
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Environmental Offi	icer Name and Qualific	ations:					
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#### 1. INTRODUCTION

These Contractor Safety and Environmental Regulations set out the Health, Safety and Environmental requirements for Contractors working in ESB Generation & Trading Business Unit (G.T.) Generating Stations. The term 'Generating Stations' is taken to mean thermal, hydro, wind, battery, solar, sync-compensator generating locations and other G.T. asset locations). It also provides information on basic control measures ESB has put in place to ensure safety and protection of the environment.

PLEASE NOTE THAT THESE **REGULATIONS** APPLY TO BOTH IRISH & UK GENERATING STATIONS

As a minimum, Contractors must comply with all relevant Irish, UK and EU safety, health and environmental legislation, including relevant national and industry codes of practice. ESB has developed safety standards, guidance documents and procedures relating to particular works which the Contractor must adhere to. Appropriate sections from these will be advised.

The Contractor is responsible for implementing the requirements of these Contractor Safety and Environmental Regulations, and for taking all further precautions necessary to ensure safety and the protection of the environment. The Contractor shall ensure that their sub-contractors comply with these Regulations.

Each individual has a legal obligation to take care of his own safety and a responsibility to protect the environment to ensure that they does not put others or the environment at risk. Where a person identifies a risk, they shall take appropriate steps to ensure that it does not place themselves or others or the environment in danger. They shall also bring this risk to the attention of their Supervisor or other appropriate person(s) without delay.

Each individual should look out for the safety of others. Each individual should step back if something unsafe and report it to the appropriate person. ESB through its 'Safe and Sound' culture encourages all to speak up, report, give feedback, and encourage psychological safety.

The working language in ESB G.T. Generating Stations & locations is English. Where non-English speaking staff are employed by the Contractor, sufficient persons shall be made available by the Contractor to enable all communications from both ESB and the Contractor, either verbal, written or safety/environment signage, to be translated effectively into the other language and to ensure that the non-English speaking staff understand. The Contractor's site management personnel, the Contractor's Permit Holder and Safety/Environmental Officer (where one is required under the Contract) shall be fluent English speakers.

Contractors should note that both Safety and Environmental performance are factors considered in determining purchasing and contract decisions.

ESB is responsible for providing resources only where explicitly stated.

# 1.1 Issue of Contractor Regulations

These Contractor Safety and Environmental Regulations form part of the terms and conditions of all contracts on ESB G.T. Generating Stations. The Contractor shall verify that they have taken account of these Regulations before beginning work on site by signing the CONTRACTOR DECLARATION contained at the back of this document and uploading a copy of the declaration onto the on-line induction system. The CONTRACTOR DECLARATION is valid for 1 year for all Generating Stations and should be revised when updating your insurance documents on the platform.



# 1.2 Competency Assessment

These Contractor Safety and Environmental Regulations shall be issued to all Tenderers/Contractors prior to starting work on any ESB location.

All Contractors shall submit the information/documentation as per the Vendor Information Request Form to ESB to facilitate competency assessment in advance of beginning work. Where requested by ESB, Contractors shall submit the information/documentation as per the Vendor Information Request Form on an annual basis.

#### 2. SAFE SYSTEM OF WORK

The ESB G.T. Safe System of Work set out the roles and responsibilities of persons working in Generation and Trading Locations i.e. G.T. Generating Stations. The outline of these roles is given below. The ESB G.T. Safe System of Work define Safety as either General Workplace Safety or Safety from the System.

Safety from the System Dangers are system derived hazards such as pressurised fluids, rotating machinery or electricity. General Workplace Safety involves hazards which are not system derived such as access & egress, tools, lighting etc. The Safety from the System Coordinator will provide safety from system derived hazards, the Work Controller will establish acceptable General Workplace Safety arrangements and during the course of the work the Permit Holder will maintain and manage the General Workplace Safety arrangements.

#### 2.1 Work Controller

Unless otherwise stated in the contract, ESB will appoint a nominated person(s) to be known as the Work Controller who will have responsibility for the safety of the Contractor's personnel only in so far as their safety may be affected by ESB Equipment, or by any work or operation being carried out in the station by persons other than the Contractor's employees.

Prior to a Contractor employee being appointed to the role of Work Controller, they shall be trained, assessed and authorised by ESB.

The Work Controller will also liaise on environmental issues as described in this document.

#### 2.2 Permit Holder

All work carried out under a Permit shall be co-ordinated by one person known as the Permit Holder. The person who signs for acceptance of a Permit is the referred to as the Permit Holder.

This person will complete specific Permit Holder training and assessment. If the person is deemed not to be capable of passing the Permit Holder assessment after several attempts, the Contractor must provide an alternative person to sit the training and pass the assessment. It is the Contractors responsibility to provide a Permit Holder on site at all times when work is in progress.

The Permit Holder shall advise the Work Controller of all known risks from the work and of associated Control Measures. They shall satisfy himself that the Permit covers the work in hand. The Permit Holder shall be present at the Location at all times when this work is taking place.

The Permit Holder has responsibility for maintaining General Workplace Safety and the Control Measures agreed with the Work Controller. They shall carry out work safely in accordance with the Permit and Risk Assessment. The Permit Holder shall monitor and review the risks posed by the work on an ongoing basis using a Point of Work Risk Assessment and shall apply additional Control



Measures where necessary. In any case of doubt regarding Control Measures or safe working procedures, they shall cease work if necessary and refer the matter to the Work Controller.

Before work starts, the Permit Holder shall at the location of the work activity:

- Positively identify the correct Equipment by referring to his Permit and Equipment labelling,
- Clearly identify adjacent equipment that shall be avoided during the work,
- Inform all members of the working party in the Control Measures necessary to avoid danger.
- Ensure all members of the working party sign the Permit

The Permit Holder shall satisfy themselves that an appropriate Risk Assessment is in place and that each member of the working party has clearly understood the Permit and associated Control Measures.

Before acting in the role of Permit Holder, a person shall have received appropriate induction/training to the Location, including:

- 1. Responsibilities of the Permit Holder,
- 2. Requirement for the Permit Holder to remain on site while the work is ongoing,
- 3. Transfer of Duties from one Permit Holder to another,

# 2.3 Members of the Working Party

No person shall start work under a Permit until they have been given a positive instruction to commence by the Permit Holder.

It is the duty of each member of the working party engaged in work to co-operate with the Permit Holder, to observe all Control Measures, and to carry out all instructions.

If a member of the working party is in any doubt about what Equipment to work on, or what Control Measures to observe, they shall not start work. If work has already started, they shall cease work. In such circumstances they shall make their concerns known to the Permit Holder who will then clarify their instructions.

Once the Permit is in force, the Permit Holder is responsible for maintaining general workplace safety arrangements. This is confirmed by the use of a Point of Work Risk Assessment which must be completed each day/shift prior to starting work or whenever any member of the working party deems a re-evaluation to be required.

Safety is a core value at ESB. All persons working at ESB are responsible for ensuring they work safely at all times and finish their work in a safe and sound manner.

# 2.4 Transfer of Duties by the Permit Holder

A Permit Holder may transfer their duties to another authorised person who then becomes the Permit Holder provided the transfer is authorised by the Work Controller.

It is the responsibility of the outgoing Permit Holder to ensure that the incoming Permit Holder is fully briefed on the status of work, including all aspects of the work that may affect safety or the



environment. In the absence of the outgoing Permit Holder, the incoming Permit Holder shall be briefed by the Work Controller. The incoming Permit Holder shall familiarise themselves with the status of the work.

#### 2.5 Permit

Work may only be carried out with the permission of the Work Controller will arrange isolation of the Equipment for the purpose of work and will take any further operational precautions necessary to make the Equipment safe. A Permit, when signed, is a declaration from the Work Controller to the Permit Holder that, subject to the compliance with subsidiary permits / declarations and application by the Permit Holder of Control Measures, specified work may commence on named Equipment and locations.

A Permit is required for all works carried out by the contractor unless otherwise stated by the Work Controller. Where a Permit is not issued the duties of the Permit Holder as specified by these Contractor Safety and Environmental Regulations shall be carried out by the contractor's charge person/supervisor.

Subsidiary documents to the Permit may be required dependent on the scope of the work and these will be advised by the Work Controller.

Subsidiary documents include the following:

- Confined Space Entry Controls Document
- Hot Work Controls Document
- Work at Height Controls Document
- Work on, near or over Water Controls Document
- Lifting Operations Controls Document
- Road Works / Excavation Controls Document
- ATEX Controls Document
- Asbestos/MMMF/Heavy Metals Controls Document
- Ionising Radiation Controls Document
- Diving Declaration
- Transportation Controls Document
- Stored Energy Controls Document
- Hazardous Substances Controls Document
- Declaration of Fitness for First Connection

The Permit Holder and all members of the working party shall sign the Permit. The signature of the Permit Holder for acceptance is a declaration that they understand the work scope, will comply with the Control Measures and any other instructions given. The Permit Holder shall keep the Permit readily available and shall clear the Permit when the work is finished.

# 2.6 Cancelling a Permit

The Permit Holder may sign for clearance of a Permit provided they have satisfied themselves, with regard to the Permit, that:

- 1. The work has ceased,
- 2. All persons, tools and materials under their control are clear of the Plant,



 There are no safety/environmental issues and or/limitations to operation with regard to the return to service except those recorded on the clearance section of the Permit and advised to the Work Controller.

The signature of the Permit Holder for clearance is a declaration that the requirements above have been met.

On clearance, the Permit Holder shall return the Permit to the Work Controller.

#### 2.7 ROSH/Testing Permit

A ROSH/Testing Permit, is a Permit which includes specified Points of Isolation that may be operated under the control of the Permit Holder in accordance with an Approved Procedure.

## 2.8 Isolation, Locks and Tags

ESB operate a "lock out, tag out" system to ensure safety from Equipment. Under **no circumstances** may locks, "Tags", Points of Isolation, or other similar attachments to Equipment be interfered with or removed without prior authorisation from the Work Controller.

Any unsecured equipment relating to Points of Isolation including locks, keys or tags observed shall be reported immediately to the Work Controller.

#### 2.9 Interference with Equipment

Except where specifically authorised by the Work Controller, Contractor's personnel may not interfere with, adjust, or otherwise tamper with ESB Equipment.

Similarly, machine guards, hand-rails, floor grating, barriers or any such safety device must not be removed without the consent of the Work Controller. Notices and hard barriers must be in place during removal and all items removed must be reinstated in full working order.

#### 2.10 Access restrictions

Contractor's personnel shall not enter parts of the station outside the immediate work areas unless agreed with the Work Controller.

# 2.11 Work in the Vicinity of Electrical Equipment

Unauthorised entry into switchgear rooms, relay rooms, computer rooms, control rooms, electrical compounds and other locations containing electrical equipment is strictly prohibited. Contractors must adhere to any particular local requirements regarding access into such locations (e.g. Contacting control room prior to entry). In serious circumstances, a person shall be denied access to site.

Extreme caution shall be exercised where work is undertaken in the vicinity of switchgear, relays, control cabinets, cabling and similar equipment. Control measures to minimise the risk to personnel working in such locations must be considered during risk assessment. Unauthorised interference with such equipment is strictly prohibited. In serious circumstances, a person shall be denied access to site as per the procedure in section 11.7 of these Contractor Safety and Environmental Regulations.

Work shall be conducted in a clean manner so as not to contaminate electrical equipment.

PPE requirements for work in the vicinity of electrical equipment are detailed in section 11.12 of these Contractor Safety and Environmental Regulations.



#### 2.12 Control of Sub-contractors

The provisions of these Contractor Safety and Environmental Regulations apply to both the main Contractor and to any sub-contractors (this term also includes self-employed persons and agents of the Contractor) under their control. Responsibility for implementing its provisions with respect to sub-contractors rests entirely with the main Contractor. No sub-contractor may be brought on site without the explicit agreement of ESB. The names of all sub-contractors employed under the Contract must be listed on a Contract document.

The Contractor shall provide a written procedure for the selection and control of sub-contractors. This shall include a methodology for ensuring a sub-contractors' competence and the provision of resources. In addition, such procedures shall include control measures to ensure that plant and equipment being supplied by sub-contractors is safe, fit for purpose and free of products containing prohibited substances, such as asbestos.

# 2.13 Control Of Major Accident Hazards (COMAH/Seveso)

Where the Generating Station is subject to the requirements of COMAH Regulations, the contractor shall comply in full with requirements of the stations Major Accident Prevention Policy (MAPP).



#### 3. CONTRACTOR SENIOR MANAGEMENT LEADERSHIP

It is a requirement under these regulations that the Contractors senior management visit site on a monthly basis to complete a safety audit of works on site. Visible senior management safety leadership is an integral part of how ESB operate.

This applies to all ESB framework Contractors, Contractors engaged to work on projects lasting longer than 30 days and all major outages.

# 4. INDUCTION PROCESS, FITNESS & COMPETENCE TO WORK

#### 4.1 Contractor Staff Registration

All Contractors' in Generating Stations must register their companies and employees on the on-line safety induction platform and upload all required documents for their company and for each individual. These are pre-determined based on role and technical qualifications.

# 4.2 Induction Safety and Environmental Training

On successful registration the Contractors' staff will automatically be assigned an online safety induction course which must be completed, and an assessment passed, prior to arrival to site. This on-line induction **is valid for 2 years**, for all Generation Stations..

On arrival to site all Contractors' staff will receive a site-specific safety and environmental induction. This training will be provided by the Station staff or a nominee.

Where Contractors' staff are non-English speaking, advance notice must be given to ESB and the Contractor shall provide interpretation into the appropriate language during the induction process.

Permit Holders will be required to receive additional training and assessment during the induction process to advise them of their specific role and responsibilities. This is outlined in section 2.2 Permit Holder.

#### 4.3 Contractor Site Access Pass

Where the contractor induction training has been provided and an assessment successfully completed, a temporary site access pass will be issued to the Contractors staff concerned.

# 4.4 Competence and Fitness for Work

All Contractors' and sub-contractors' personnel shall be trained, competent and medically/physically fit to perform the duties assigned to them. They shall be informed of all relevant hazards and given instruction in corresponding safe methods of work including the use of personal protective equipment. In determining competency of staff to carry out particular work, the Contractor must ensure that personnel are familiar with the specific equipment being used. Records of competency must be available on ESB's on-line Induction System & on site, for examination by ESB.

To facilitate Risk Assessment, persons shall bring any known health conditions that could increase risks to themselves or others to the attention of their line manager or a higher authority.

Persons should also highlight any health condition which may lead them to be more susceptible to the effects of EMF. This includes but is not limited to: Active implanted medical devices, Passive implanted medical devices, Body-worn medical devices.



#### UK

Any persons on site who wish to operate mobile plant (cranes, FLTs, MEWPs, excavators, dumpers, etc) must have a 'Fit to Work' certificate before they will be authorised to operate this type of plant in the Generating Station.

All Contractors' personnel must have received training in manual handling within the previous three years.

The Contractor shall ensure that any sub-contractor(s), and/or person(s) performing tasks on his behalf which have the potential to cause a significant environmental impact are competent on the basis of appropriate education, training and/or experience, and shall retain all associated records in this regard.

#### 4.5 Tool-box Talks

Throughout the Contract period, the Contractor Supervisor must ensure that at least weekly "tool-box" safety briefings relevant to the works being undertaken are given as refreshers and/or to take account of any changes in circumstances. Copies of "tool-box" safety briefings sign off sheets must be made available to ESB. Creation of a positive open, inclusive and trusting culture is encouraged by ESB and such sentiments i.e. a Safe and Sound approach should be included in the safety briefing.

#### 5. METHOD STATEMENTS AND RISK ASSESSMENTS

Where the Contractor's staff are non-English speaking, method statements and risk assessments shall be in the language(s) concerned as well as in English.

#### 5.1 Risk Assessments

Contractors shall carry out job and site-specific written risk assessments for all work activities. Both Safety and Environmental Risk Assessments shall be provided to the Work Controller in advance of the Permit/Safety Document being issued. All Risk Assessments must ensure that that effective control measures are put in place by the contractor to control any hazards. The Risk Assessment shall be updated to take account of changes to the task and work environment. Risk Assessments shall be approved and signed by a competent person appropriate to the task.

Risk Assessments shall be provided to the Work Controller in advance of the work being required and shall allow the Work Controller appropriate time to review the suitability of the Risk Assessments before work is to commence.

The Risk Assessment shall be held at the immediate worksite and made available to those carrying out the work. The control measures specified in the Risk Assessment must be briefed to those carrying out the work. All staff involved in the work must sign to confirm receipt of this instruction. These records must be kept available for review by ESB.

Any activity involving a significant environmental hazard must be covered by an appropriate risk assessment detailing the control measures and/or procedures required to enable the work to be carried out with due concern for the environment.

## 5.2 Method Statements

A written method statement shall be provided for all work activities. These shall state the control measures/procedures proposed in order to enable the work to be carried out in a safe manner (e.g. safe use of tools/equipment, safe use of chemicals, personal protective equipment required, etc.). The



controls specified must be explained to all those working on the activity. The method statement must be updated to take account of changes to the task and work environment.

The method statement should include a step-by-step explanation of how the work is to be done, especially in relation to the health and safety aspects. If possible, it should follow a recognised code of practice where available or be otherwise proven in a similar work situation. Method statements shall also include relevant environmental aspects.

Method statements shall be approved and signed by a competent person acting on behalf of the Contractor and be supported by job specific written risk assessments.

Method statements shall be provided to the Work Controller in advance of the work being required and shall allow the Work Controller appropriate time to review the suitability of the method statement before work is to commence.

All Method Statements must ensure that effective control measures are put in place by the Contractor to control any risks.

#### 6. HEALTH AND SAFETY TRAINING

Information relating to ESB's H&S training requirements can be found on ESB's website located at the following link <a href="https://www.esb.ie/who-we-are/procurement/esb-procurement-faqs">https://www.esb.ie/who-we-are/procurement/esb-procurement-faqs</a> Additional requirements may be included at tendering/contract placement stage.

# 6.1 Safety Awareness Scheme (SOLAS Safe Pass cards) Rol

Contractors' personnel carrying out "Construction Work" as defined by legislation in ESB Generating Stations must be in possession of valid Safety Awareness Scheme Cards (SOLAS Safe Pass or a recognised equivalent).

A SOLAS Safe Pass Card is not required for a person working on the installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed air, hydraulic, telecommunication and computer systems, or similar services, where –

- The person is normally domiciled outside the state and
- The person's normal place of employment is outside the state, and
- The person has not been working on the project for a period in excess of 20 working days in any 12-month period.

Person(s) not required to be in possession of a SOLAS Safe Pass Card as outlined above are required to submit a letter to ESB from their employer describing the work to be undertaken, the competence of the person undertaking that work, and the specific date of commencement and anticipated date of completion of that work.

# 6.2 SOLAS Construction Skills Certification Scheme (CSCS) and Training requirements Rol

All persons carrying out activities covered under the Construction Skills Certification Scheme must be in possession of valid and relevant SOLAS Construction Skills Certification Card or a recognised equivalent.



Trainees, who are not in possession of SOLAS Construction Skills Certification Cards or a recognised equivalent, may work provided:

- 1. Agreement in writing from ESB has been obtained for trainees to be engaged on work covered by the Contract and;
- 2. The trainee is under the close personal supervision of a person who is in possession of the relevant card and;
- 3. The trainee has trainee identification and an associated training log book.
- 4. A list of approved equivalents to the Safety Awareness Scheme and to the Construction Skills Cards is available on the SOLAS Website at www.solas.ie. All contractors must possess a SOLAS Safepass Card and have submitted a request to SOLAS for the issue of a CSCS in lieu of their CPCS Plant Operations Cards (UK or equivalents in other EU countries) to carry out any activities such as Rigging, MEWP operation, etc.

The following activities shall be covered by training which meets legislative requirements and, where applicable, is certified to a recognised standard:

- Persons carrying out asbestos removal activities.
- Persons operating mobile elevating work platforms.
- Persons operating forklifts and other similar Plant.
- Persons changing abrasive wheels on fixed and portable grinders.
- · Persons undertaking first aid activities on site.
- Persons involved with underwater diving activities.
- Persons working in confined spaces.
- Persons using personal fall protection equipment.
- Persons working on or over water

Where the Contractor's staff are non-English speaking, method statements and risk assessments shall be in the language(s) concerned as well as in English.

#### 7. SAFETY AND ENVIRONMENTAL AUDITING

All contractors are required to carry out audits while carrying out work. A schedule of site-based audits will be agreed in advance of the work beginning between ESB and the Contractor. Consideration to this schedule will include the numbers of persons working on site, scope of work and the hazard/risk associated with the work.

Where contractors have more than 20 persons on site (either directly or as sub-contractors) for more than 10 working days, then a member of the Contractors' management, other than the Contractors' site management, shall conduct at least one formal safety audit per month.



In addition, it is expected that the Contractors' safety officer will carry out frequent site safety and environmental audits. All safety and environmental audit records will be made available to ESB on request.

The Contractor shall ensure that it's Environmental Management System and associated procedures are audited by them at regular planned intervals. The Contractor shall provide information on the results of such audits on request. These audits may be incorporated with health and safety audits. The Internal Audit schedule shall be appropriate to the activities of the Contractor and the nature of the works being undertaken. Audit records shall be made available at all times for inspection.

The Contractor shall also co-operate with the requirements of ESB's own Safety/Environmental auditing programme.

# 8. INJURIES, INCIDENTS AND EMERGENCIES

# 8.1 Reporting and Investigation of Injuries and Incidents

All injuries (whether minor or those incurring lost time), Dangerous Occurrences and "near misses" must be reported as soon as possible, but within 30 minutes, to the Work Controller/Control Room. Contractors must carry out their own formal investigation into all injuries, Dangerous Occurrences and "near-misses", and submit written reports to the Work Controller/Operations Manager. Such investigations shall identify both the direct and indirect (root) causes of the accident/incident. In addition all persons must co-operate with and assist ESB in its own investigations.

ESB supports the open and proactive reporting of safety incidents (Good Catches & Near Misses), and the empowering of contractors' staff to 'stop the job' when they have safety concerns. Any incident which occurs that had the potential to cause harm should be reported to the Work Controller as soon as possible.

#### Rol

All accidents must be recorded by the Contractor in their Accident Book in accordance with the Social Welfare (Consolidation) Act 1981 (as amended)

Reportable accidents and Dangerous Occurrences must be **reported directly by the Contractor** to the Health and Safety Authority in accordance with the Safety, Health and Welfare at Work (General Application) Regulations SI 44 1993. However, the Contractor must provide a copy of the statutory IR1 or IR3 form (as appropriate) to the Work Controller.

#### <u>UK</u>

All accidents must be recorded by the Contractor in their Accident Book in accordance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)

Reportable accidents and Dangerous Occurrences must be **reported directly by the Contractor** to the Health and Safety Executive in accordance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013

Environmental incidents shall be reported immediately to the Work Controller and where appropriate to the requisite statutory authority. When an incident occurs, the Contractor shall take mitigation actions appropriate to the significance of the incident. The contractor shall co-operate and assist ESB, and any other statutory or regulatory bodies, in measures for protecting the environment and the investigation of incidents.



Communication with news media is the sole responsibility of the ESB Station/Plant or location Manager (as applicable) in relation to any incidents involving its staff and or its contractors and subcontractors that occur on its site. Contractor staff shall not discuss the details of injuries/incidents with third parties other than those under which they are under a legal obligation to provide such information (e.g. Gardaí, PSNI, Police, HSA, HSE).

#### 8.2 First Aid

Occupational first aid and welfare facilities may be provided by ESB subject to local agreement. Otherwise, such facilities shall be provided by the Contractor taking into account statutory requirements, the size of, and hazards associated with the work. First aid facilities provided shall be to the satisfaction of the Work Controller.

#### 8.3 Contractor's Emergency Procedures

Contractors shall co-operate fully with, and be governed by, ESB emergency procedures. Contractors shall ensure that their personnel are familiar with the relevant emergency procedures, including those advised by ESB. Contractors must follow the instructions given to them by ESB at all times.

Contractors shall make provision, and have written procedures, for any likely emergency that could arise as a result of their activities. This shall include the availability of sufficient resources to deal with the emergency, a method for raising the alarm with the ESB control room and/or emergency services, taking immediate action to mitigate the consequences of the emergency, and administering any specialist first aid treatment that may be required.

The contractor shall provide for any likely environmental emergency that could arise through the work. The contractor shall take immediate action to mitigate the consequences of an environmental emergency and co-operate fully with ESB's emergency procedures.

Where work is required to be carried out at height, in a confined space or over water, the Contractor shall have a rescue plan, and make provision, for the rescue of personnel unless other arrangements have been agreed with the Work Controller (e.g. where it is agreed that the Contractors' staff are covered by ESB's own rescue procedure). This shall include personnel trained in any necessary rescue techniques, the provision of rescue equipment and the provision of a written rescue plan.



# 9. HEALTH, SAFETY AND WELFARE AT WORK (CONSTRUCTION) REGULATIONS Rol

#### 9.1 Construction Work

Unless otherwise stated in the contract all work carried out on ESB Generating Stations is defined as 'Construction Work' under the Safety, Health and Welfare at Work (Construction) Regulations SI 291 of 2013 as amended.

## 9.2 Roles and appointments

The Contractor shall be advised prior to contract award of the particular roles and appointments, as defined in the Safety, Health and Welfare at Work (Construction) Regulations SI 291 of 2013 as amended (i.e. Client, Project Supervisor Design Process, Project Supervisor Construction Stage), associated with the work scope.

Should the Contractor be required to discharge any of these roles ESB will notify the Contractor in advance as part of the Tender Process.

In all other cases of 'Construction Work', the roles of Project Supervisor Design Process and Project Supervisor Construction Stage will be carried out by persons discharging these duties on behalf of ESB.

# 9.3 **Design Safety**

Where the Contract includes design of permanent works or temporary works, the Contractor shall be the designer for the Contract scope. Unless otherwise agreed in the Contract, the Contractor shall:

- Comply with the Safety, Health and Welfare at Work Act 2005 (as amended) and the Safety, Health and Welfare at Work (Construction) Regulations 2013 as amended.
- 2. Take account of the General Principles of Prevention (as defined by safety legislation).
- 3. Produce design and as-built engineering drawings, design calculations, design parameters and material specifications.
- 4. Carry out written design risk assessments.
- 5. Implement a documented design "change control" procedure.
- 6. Produce and implement a system of pre-commissioning and commissioning check-lists and procedures to ensure that new/modified Plant is safely put into service.

Copies of all design related documents shall be verified by a competent person employed by the Contractor and submitted to ESB.



# 9.4 Safety File

The contractor shall provide all necessary information to the Project Supervisor Construction Stage which may be required by the Client to form part of the Safety File. Such information shall include design information, technical drawings and technical manuals related to any works they carry out.

# 10. CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS UK

Any Generating Station project that is scheduled to

- Last longer than 30 working days and have more than 20 workers working simultaneously at any point in the project, or
- Exceeds 500 person days

Shall be notified to the HSE by the ESB Generating Station and the project will be classified as a CDM notifiable project.

The Construction (Design and Management) Regulations aim to improve Health and Safety through:

- · sensibly planning the work so the risks involved are managed from start to finish
- have the right people for the right job at the right time
- · cooperate and coordinate your work with others
- have the right information about the risks and how they are being managed
- communicate this information effectively to those who need to know
- consult and engage with workers about the risks and how they are being managed

Under the regulations defined roles must be appointed and delivered. These roles will be appointed by ESB and any contractor will be notified at the time of tendering for the work. Where a contractor is appointed into a defined role they must complete this role as set out in legislation.

Any changes to site practices (access, welfare facilities, general H&S arrangements, environmental procedures) will be notified to all contractors working on site including those not involved with the notifiable project.



#### 11. GENERAL REQUIREMENTS

# 11.1 Safety Management System (e.g.ISO 45001)

ESB Generating Stations operate to certified Safety Management Systems (e.g. , ISO 45001). Contractors shall co-operate with ESB in fulfilling the requirements of these systems. This may include audits to ensure that work is being carried out in accordance with these Contractor Safety and Environmental Regulations .

# 11.2 ISO 14001 Environmental Management System (EMS)

All ESB Generating Stations have established environmental management systems (EMS) certified to ISO 14001. The framework for this system is detailed in each stations local environmental policy and contractors must comply with the requirements of this policy whilst carrying out work for the station. A copy of the Environmental Policy is available on request.

Under the EMS, Generating Stations are required to ensure that materials supplied, and activities carried out, by contractors or their sub-contractors are controlled and managed to avoid any damaging environmental impact. Additional to the requirements to comply with environmental licenses, permits and legislation, the Contractor is required to demonstrate good environmental awareness and a high standard of environmental risk management (e.g. adopting provisions and controls not specifically required by law).

# 11.3 ESB Safety Statement

The local ESB Safety Statement identifies the main hazards and control measures required of those working in a generating station. These Contractor Safety and Environmental Regulations form a key element of the ESB Safety Statement. The local ESB Safety Statement is available for examination on request.

# 11.4 Contractor Safety Statement/Health and Safety Policy

A Safety Statement/Health and Safety Policy as defined by legislation, reviewed and signed by the Contractor's Managing Director must be submitted to ESB prior to placement of the Contract and updated yearly thereafter.

Upon request, Safety Statements/ Health and Safety Policies for any sub-contractors shall also be made available to ESB by the Contractor. The Contractor must verify that all sub-contractors have valid and up-to-date Safety Statements/ Health and Safety Policies.

#### <u>Rol</u>

Contractors with three or less employees who do not have a Safety Statement must demonstrate that they comply with the HSA Construction Safety Code of Practice.

#### UK

Contractors must have a Health and Safety Policy, but those who have fewer than five employees don't have to write anything down.



# 11.5 Provision of Safety/Environment in Tender Price

Contractors shall make provision in their Tender Price for safely discharging the Contract, protecting the Environment and for meeting the requirements of these Contractor Safety and Environmental Regulations . As far as is possible, such provision (e.g. work at height equipment, training, safety equipment) should be identified in the make up of the Tender price.

# 11.6 Alcohol and Drugs

Contractors' staff must not be under the influence of alcohol or illegal substances while in a Generating Station and must not bring any such substances on to ESB property. Medication must not interfere with a person's ability to carry out work safely. Contractor staff are required to inform their Permit Holder/Supervisor if they are on medication which could affect or impede their work.

Carrington Power Station operates a random Drug and Alcohol testing program to which contract staff may be requested to participate in. Any person found to be under the influence of such substances will be refused access to the site and the employing company will be contacted.

## 11.7 Safety and Environmental Violations

Breaches in either safety or environmental standards will not be tolerated. ESB reserves the right to terminate the Contract should such breaches occur. The Work Controller or a nominee is empowered to stop work if unsafe or environmentally unsound practices take place. All persons must report any unsafe acts or conditions to the Work Controller. Time lost or costs associated with such stoppages will be the responsibility of the Contractor.

In the event of unsafe practices and environmental breaches being identified, disciplinary procedures shall normally be as follows:

- 1. In the first instance, a verbal warning with a written record of the person's name, details of the unsafe practice/breach and the time/date concerned.
- 2. In the second instance, a written warning shall be given.
- 3. In the third instance, the person shall be permanently denied access to the site.

In particularly serious circumstances, a person shall be denied access to site without the above procedure being adopted.

# 11.8 Young Persons, Pregnant women and Sensitive Risk Groups

The Contractors Manager or Permit Holder must obtain written permission from the Work Controller before allowing Young Persons (aged from 16 to under 18), Pregnant Women or sensitive risk groups to work in the Generating Station. Prior to work commencing, the Contractor must carry out a written risk assessment of the specific activities of these persons and provide them with an individual safety briefing.

Persons under the age of 16 (child) must not be put to work on site by the Contractor.

Written risk assessments shall be carried out and appropriate control measures put in place to cover work by sensitive risk groups. Risk assessments for Young Persons shall consider age, experience and supervision.



# 11.9 Safety Officer

Where more than 20 persons are under the control of the Contractor (either directly or as sub-contractors) within the station and where the work is deemed "Construction Work", the Contractor must appoint a competent full-time on-site Safety Officer solely for the work covered by the Contract scope.

The Contractor's Safety Officer shall carry out formal recorded safety inspections of the Contractor's work activities at least once per day, attend all safety meetings associated with the Contractor's work activities and shall attend the weekly safety briefings and shall submit a formal report at least once per week to the Work Controller through the Contractor's Permit Holder.

#### 11.10 Environmental Officer

For contracts where significant environmental risks have been identified as part of the Risk assessment (e.g. working on or near water, working with fuel, oil, chemicals etc.) a Contractor nominated Environmental Officer shall be required. This person will be responsible for implementing and operating the Contractor's Environmental Management. The Environmental Officer shall be a suitably qualified/competent person and shall be knowledgeable about the works being undertaken. The Environmental Officer shall have the necessary authority to propose alternative or additional work methods necessary to satisfy any environmental aspect of the works. The Contractor is responsible for the environmental performance of its sub-contractors.

#### 11.11 Movement of Vehicles

Vehicles entering the station must be in good condition, loaded safely and must conform to the local speed limits. Vehicles shall be parked in authorised locations only. Drivers must hold valid driving licences for the classes of vehicles concerned. Keys must not be left unattended in vehicles while they are on ESB locations unless explicitly required by local procedures.

A spotter must be used for reversing operations involving large vehicles/machinery.

Where the Contractor is required to bring a crane, a ready-mix truck fitted with a conveyor, a tipper truck or a vehicle with a high load into the station, prior permission must be obtained from the Work Controller in order to eliminate the risk of electrocution by contact with overhead power lines. Only routes and work locations that have been authorised by the Work Controller shall be used.

Consideration must be given to the presence of overhead obstacles (e.g. electrical lines, pipe bridges, cable tray). The use of height restrictors or other suitable controls must be employed where working under or near such equipment. Particular care is also required where plant is required to traverse over excavated material as clearances may be reduced.

All works vehicles shall be clearly labelled with the contractor name and contact details. Details of inspection records/certification shall be made available to ESB on request.

A Transportation Controls Document shall be obtained from the Work Controller where the transportation of loads could give rise to Danger due to the nature of the load or load route.

See ESB SSoW Instruction GT-SSoW-I-033 'Transportation' for further information.

# 11.12Personal Protective Equipment

Personal protective equipment is the last option for risk control and is only acceptable when all other control measures have been explored and are judged not reasonably practicable.



Personal protective equipment appropriate to the risk shall be provided by Contractors and used by their personnel. Subject to minor variations in the Local Personal Protective Equipment Policy, the following applies:

- Long sleeve work wear, helmets and safety footwear must be worn in all indoor and outdoor operational areas of Generating Stations..
- Ear-defenders must be worn in all locations where noise levels exceed statutory requirements. Ear plugs are not permitted, and can only be used in exceptional circumstances where ear-defenders cannot be used (e.g. Due to interference with other PPE, such as shotblasting hood), and with the express permission of the Work Controller.
- Goggles and/or full-face visors with an overhead splash cover must be worn where serious
  eye injuries can occur (e.g. grinding, use of corrosive chemicals, etc.). Safety glasses are an
  unacceptable alternative in these circumstances.
- Safety glasses must be worn in all indoor and outdoor operational areas of Generating
  Stations except in areas where written risk assessments indicate that such protection is
  unnecessary or will increase the risk (e.g. by reducing visibility). Safety glasses shall meet or
  exceed EN 166 Personal Eye Protection Specification, F Standard (low energy impact).
  Persons who normally wear corrective glasses shall wear safety glasses incorporating
  corrective lenses. Subject to Risk Assessment, over-glasses may be worn for short duration
  activities and where the risk of eye injury is low (e.g. visitors to site).
- An outer layer of arc resistant work wear to EN 61482 Class 1 (4kA) or a higher level of protection must be worn when in switchgear rooms, HV compounds or when carrying out work involving the risk of injury from electrical arc flash. In addition, where required by risk assessment, arc-resistant face shields and gloves shall be available to such persons and worn when undertaking specific tasks. Details of the exact type of arc-resistant personal protective equipment proposed and protection afforded shall be included in the Tender and covered in the Contractor's method statement.
- Other items of personal protective equipment (e.g. gloves, high-visibility clothing) shall be worn as required by risk assessment, or as directed by the Work Controller/local PPE policy.

Contractors are required to ensure that all items of Personal Protective Equipment are fit for use, and that those required to use it are competent in its use.

Safety harnesses may only be used where their use is justified by a written risk assessment and covered by a method statement.

This shall include specific requirements for the type and length of lanyard required (e.g. fall restraints, fall arrest, double, etc. Where a safety harness is required and the wearer is required to move position during the work activity, a double lanyard shall be used in order to ensure that the person is secured at all times). Where avoidable, a safety harness shall not be used as the primary means of fall protection. Safety harnesses must be inspected prior to use.

Lifejackets complying with BS 12402 or equivalent shall be properly maintained, checked before each use by a competent trained person, inspected in accordance with manufacturers' instruction, and subjected to thorough examination at least every 12 months or more frequently where determined by Risk Assessment.



# 11.13 Housekeeping and waste disposal

The Contractor shall ensure that housekeeping is maintained in the work location and that safe means of access and egress are provided and maintained.

Particular care must be taken during work that the area is kept as clean as possible, is free of tripping hazards and that no fire risk is created by a build-up of combustible material or by contact of combustibles with possible sources of ignition. Under no circumstances shall fire points, emergency exits or emergency access ways be blocked.

The Contractor is responsible for the segregation and disposal of all waste arising from their work, welfare and canteen facilities, except where otherwise agreed. This must be done in accordance with legislation and station procedures for the types of waste produced.

The use of cleaning agents must not create an environmental hazard. The Contractor may only use the Station's waste disposal facilities where agreed with the Work Controller. The work areas shall be left in a clean condition to the satisfaction of the Work Controller. The cost of cleaning shall be borne by the Contractor.

#### 11.14 Equipment for Protection of the Environment

Equipment for protection of the environment, appropriate to the risk shall be provided and used by the contractor in accordance with the Station's licence/permit and local requirements. Such equipment includes portable bunds for liquids held in significant quantities; equipment to contain, treat and mop up spills; and provision to minimise noise. Bunds shall have a holding capacity of 110% of the capacity of the biggest vessel within the bund. Fuel bowsers or fuel storage (e.g. for diesel generators) must be double skinned in addition to 110% bunded.

# 11.15 Welfare arrangements

The Contractor shall provide his own welfare facilities to the standard as set out in the Safety, Health and Welfare (Construction) Regulations 2013/Construction (Design and Management) Regulations 2015 as amended, unless alternative arrangements have been agreed with ESB. Welfare facilities include, but are not limited to, shelter and accommodation for clothing and for taking meals, changing rooms and lockers, washing and suitable sanitary conveniences.

Work or personal vehicles shall not be used for the purpose of taking meals unless specifically designed for this purpose.

# 11.16 Temporary accommodation and storage facilities

Delivery and location of temporary accommodation must be covered by Risk Assessment and coordinated with the Work Controller.

Temporary accommodation and storage facilities brought to site by the contractor must be properly secured to prevent overturning in high winds. Where bolting down is deemed unsuitable, alternative control measures shall be put in place. Consideration must also be given to other hazards arising from its placement at the temporary location.

Access platforms/steps/ground to accommodation blocks shall be such that the risk of slipping/tripping/falling is minimised.



## 12. WORKING ENVIRONMENT

# 12.1 Work in High Noise Areas

When planning and risk assessing work, the Contractor must give consideration to the normal working noise levels, specific work locations (e.g. Confined/enclosed spaces where noise levels may be exacerbated), and noise generating activities associated with the scope or created by others in the vicinity.

The control of noise levels, and the provision and use of hearing protection, shall be in accordance with legislation. Access to areas where the noise is  $85 \, \mathrm{dB}(A)$  or above shall be limited and appropriate noise signs erected. PPE must be worn where noise levels exceed  $85 \, \mathrm{dB}(A)$  or where impulse noises (i.e. loud bangs) can exceed  $137 \, \mathrm{dB}(C)$  in relation to  $20 \, \mu Pa$ . Ear plugs are not permitted, and can only be used in exceptional circumstances where ear-defenders cannot be used (e.g. Due to interference with other PPE, such as a shot-blasting hood), and with the express permission of the Work Controller.

The Contractor shall comply with statutory limits on noise emissions at all times. Furthermore, nuisance noise must be avoided when and where possible.

# 12.2 Ensuring a safe atmosphere

Work which creates a hazardous atmosphere shall be avoided where practicable. Where such work cannot be avoided, the principles of prevention shall be employed to reduce the hazardous nature of the atmosphere created.

Where there is an unavoidable risk of a hazardous atmosphere being generated due to some agent or process, the control measures to be employed shall include the provision of:

- adequate ventilation and/or extraction at source,
- continuous monitoring for safe atmospheres using one or more appropriate devices that automatically alarm.

Continuous monitor values shall be recorded and assessed at an appropriate frequency.

Where natural or forced ventilation, or extraction at source is not reasonably practicable, and where the Risk Assessment has determined, fresh air hose breathing apparatus may be used. Similarly, as determined by risk assessment, where hazardous dusts are present appropriate respiratory protection apparatus may be used. Priority shall be given to collective protection measures over individual protective measures.

Where such work is carried out in/or creates a confined space, the provisions of section 12 of these Contractor Regulations Safety and Environmental shall apply.

# 12.3 Work in Areas of Inadequate Lighting

Where existing lighting levels are inadequate for safe working, these shall be increased to a suitable level by the Contractor. Emergency lighting shall be provided for by the contractor unless otherwise specified by the Work Controller.



#### 13. SAFETY OF WORK EQUIPMENT

# 13.1 Inspection and Maintenance of Work Equipment

All work equipment shall be inspected and maintained in accordance with relevant legislation.

Examples of such work equipment include portable electrical tools, portable air tools, ladders, portable grinders, welding equipment, compressors, high pressure hoses, vehicles, safety harnesses and lifejackets.

The Contractor shall maintain inspection records for work equipment on site, and make these available for inspection by ESB.

Additionally, Contractors equipment must not have any fault that could result in damage to the environment.

Any equipment brought onto site which contains liquid fuel must be stored and used within a bund which is capable of capturing any leaks or drips from any part of the work equipment. This includes any fuel bowser which is not double skinned.

The use of 'Stanley' type knives is prohibited.

# 13.2 Portable Electrical equipment

Where portable electrical equipment is exposed to conditions liable to result in deterioration, or where its supply voltage exceeds 125V AC, it shall be inspected and tested by a competent person. These inspections shall be carried out at regular intervals and records shall be available to ESB on site.

#### Additionally:

- 1. Portable tools with a rating below 2 kVA shall be at a voltage not exceeding 125 V ac.
- 2. Hand lamps shall be at a voltage not exceeding 25 V ac.
- 3. Transformers supplying 125 V ac shall be of the double wound type with the centre point of the lower voltage earthed.
- 4. Supplies at voltages exceeding 125 V ac shall be protected by one or more residual current devices having a tripping current not exceeding 30 mA. Cables carrying voltages exceeding 125 V ac shall be of the steel wire armoured type

All portable electrical equipment with a rating below 2 kVA shall be of the Class II (double insulated) type.

# 13.3 Lifting Equipment

Statutory certificates for lifting equipment shall be kept on site and made available to the Work Controller. In addition, weekly inspections shall be carried out of all lifting appliances while in use.

# 13.4 Use of ESB Work Equipment

The use of any ESB work equipment is subject to the express permission and authorisation of the Work Controller. Any persons permitted to use ESB work equipment must be competent in its use and familiar with its operation. Certificates of training shall be made available to the Work Controller.



#### 14. LIFTING OPERATIONS

Lifting operations are a regular feature in **Generating Stations** operations.

Where these lifting operations present a significant risk, a Lifting Operations Controls Document shall be issued by the Work Controller. Where required, the Contractor may be required to produce a lifting plan.

Where overhead works place those below at risk from falling objects, access to the area below shall be prohibited by means of barriers and warning signs, unless a banksman is present at all times to enforce the exclusion zone. Such circumstances include lifting operations with cranes and the erection of scaffolds.

In all cases, lifting equipment shall be:

- Inspected before use, by the user, on each occasion.
- · Rated for the lift.
- Within its inspection interval.

Banksmen shall hold relevant training and certification for Slinging/Signalling or a recognised equivalent. Banksmen shall be identified by means of high visibility jackets of a different colour to those worn by other site personnel.

See ESB SSoW Instruction GT-SSoW-I-039 'Lifting Operations' for further information.

# 15. CONFINED SPACES

A Confined Space means any place which, by virtue of its enclosed nature creates conditions which give rise to a likelihood of accident, harm or injury of such nature as to require emergency action due to:

- 1. The presence or the reasonably foreseeable presence of:
  - a) A flammable or explosive atmosphere
  - b) A harmful gas, fume, or vapour
  - c) A free flowing solid or an increasing level of liquid
  - d) Excess of oxygen
  - e) Excessively high temperature
- 2. Lack, or reasonably foreseeable lack, of oxygen.
- 3. Entrapment.

Tanks, condensers, deaerators, pipes, culverts, bunkers, silos, mills, fans, air heaters, boiler furnaces, boiler drums, ducts, chimneys, hoppers, penstocks, spiral casings, draught tubes or similar enclosures are typical example of confined spaces.

The need for entry into Confined Spaces should be avoided where reasonably practicable or the Confined Space modified to that it falls outside the definition of Confined Space.

Prior to entry by Contractor's personnel into a confined space, the Contractor's Permit Holder must consult with the Work Controller who will arrange any required isolation of the Plant concerned. The Work Controller will issue a Confined Space Entry Controls Document specifying the Control Measures necessary to ensure safety. The Work Controller will then issue a Permit specifying that entry to the confined space is permitted. The Contractor shall comply with all precautions specified. A door person is required for <u>each</u> confined space.

Anyone entering a confined space must be provided with appropriate information, training and instruction appropriate to the particular characteristics of the proposed work activities.



See ESB SSoW Instruction GT-SSoW-I-036 'Management of Work in Confined Spaces' for further information.

#### 16. WORK AT HEIGHT

A Work at Height Controls Document shall be issued for the following:

- Work on chimneys
- Work within 3 meters of an unprotected edge (excluding work near an unguarded water's edge)
- · Work on fragile roofs
- · Work on pitched roofs with unguarded edges
- Where determined by risk assessment

Where a person could fall a distance liable to cause injury, the following hierarchy of Control Measures shall be applied:

- 1. Use collective fall prevention measures such as guardrails, barriers, mobile elevating work platforms and scaffolds.
- Use personal fall prevention measures such as a harness with fall-restraint lanyard attached to a secure anchor. The length of the fall-restraint lanyard shall physically prevent the person from getting to the dangerous edge.
- 3. Use collective fall arrest measures. Safety nets, once properly rigged, are considered one of the best forms of fall arrest available and can protect everyone within the area of the net. They also allow maximum freedom of movement.
- 4. Use of personal fall arrest measures such as a harness with fall-arrest lanyard appropriately attached to a secure anchor.

Persons working on scaffolds, on open mesh grid platforms and in other locations from where small objects could fall on to persons below, shall use appropriate means to minimise this risk. This shall include the storage of material in buckets/bins, the provision of suitable edge protection and suitable floor coverings and minimising openings in platform surfaces through which objects could fall.

#### 16.1 Ladders

Ladders should only be used as work equipment where a risk assessment shows the use of other work equipment is not justified. The work at height regulations do not ban ladders but do require careful consideration to be given to their use. Work from a ladder or stepladder shall only be permitted:

- Where the work is of short duration. Ladders are not suitable where they are in use for work in one position for 30 minutes or more.
- Where the risk is low. For example, if the nature of the work makes a fall unlikely or where there is a fall, the nature of the fall would be unlikely to cause injury.
- For 'light work'. Ladders are not suitable for strenuous or heavy work.



- Where the work does not involve carrying heavy or awkward tools or equipment.
- Where three points of contact (hands and feet) can be maintained for climbing and when at the working position.

On a ladder where you cannot maintain a handhold, other than for a brief period of time, other measures will be needed to prevent a fall or reduce the consequences of one.

All ladders and their attachments must be clearly marked with a unique identification or serial number and an indication that it is safe for use (i.e. within its inspection period). A register must be kept giving the following:

- A description of the ladder.
- The identification or serial number.
- The record of examinations.
- The name of the person and or Section to whom the ladder has been issued.

An effective system must be in place to ensure that all new ladders are added to the register and that ladders in use are withdrawn for testing at the appropriate time.

All persons accessing a ladder shall visually check it. They shall ensure that the ladder is within its inspection interval. Each ladder must be examined by a competent person once every 12months while in use and a written record made.

Ladders must be examined by the user prior to use. Defective ladders must not be used and must be set aside until repaired and examined by a competent person.

On a stepladder where you cannot maintain a handhold (e.g. putting a box on a shelf), the use of a stepladder will have to be justified by taking into account:

- The height of the task.
- Whether it is light work.
- Whether it avoids side loading.
- Whether it avoids overreaching.
- Whether the user's feet are fully supported.
- Whether you can tie the stepladder.
- Other relevant local conditions.

All ladders must be to EN 131, Type 1 Industrial to BS 2037 (aluminium ladders), Type 1 Industrial to BS 1129 (wooden ladders), or equivalent. "Domestic" type ladders are prohibited.

Aluminium ladders must not be brought into electrical compounds or used near electrical risks.



## 16.2 Scaffolds

Scaffolds, including mobile tower scaffolds, shall be erected only by competent scaffolders and in compliance with Code of Practice for Access and Working Scaffolds (IRE) or Scaffolding BS1139 standard (UK). Unless otherwise advised in writing by ESB, all scaffolds shall be regarded as "advanced scaffolds" as defined by the Safety, Health and Welfare at Work (Construction) Regulations SI 291 of 2013

Where a scaffold is partly erected or dismantled, a prominent warning notice shall be placed at each potential access point and barriers placed to prevent access.

When outside its inspection period, a red "Do Not Use" safety sign or tag shall be hung at all access point(s). In this event, the scaffold shall not be used.

All persons accessing a scaffold shall check that the scaffolding inspection tag is within its inspection interval.

Scaffolds shall be inspected by a competent person:

- 1. Before being put into use
- 2. Following modification, exposure to bad weather or periods without use
- 3. After impact or damage
- 4. At least every 7 days if scaffolding is higher than 2m and while in use

More frequent inspections will be required where there is evidence of recurring deficiencies, unauthorised modification or other circumstances that might affect the strength and stability of the scaffold.

A written record shall be made of each inspection. This shall be made on a suitable form, such as the HSA GA3 "Report of Results of Inspections of Work Equipment for Work at a Height" or similar. A copy of the report shall be retained on site for 5 years.

After passing inspection and before being put into use, a safety tag shall be hung at the main access point to indicate the scaffold may be used. This shall clearly identify the scaffold, the name of the scaffolding inspector, the name of the person for whom it was built and the date of the last inspection.

Each scaffold that is put into service shall be under the responsibility of one person. He shall be responsible for ensuring that it is suitable for purpose, maintained in a good condition while in use with respect to housekeeping and within its inspection period while in use.

Before issuing a Permit/Safety Document that requires the use of a scaffold, the Work Controller shall obtain permission from the person responsible. Other activities requiring general access do not require this explicit permission.

All scaffolds requiring design calculations under BS EN 12811 shall be certified by a competent Chartered Engineer or equivalent (e.g. a degree qualified engineer with suitable experience).

Trainee scaffolders shall be in a ratio of not more than one trainee to every one certified scaffolder.



All scaffolding must be erected in accordance with a design. For standard proprietary system scaffolds, built in standard configurations, it will be sufficient to use the appropriate designs developed by the system manufacturer for those configurations. Other recognised designs, e.g. such as provided for in TG20 for tube and fitting scaffolds, may also be appropriate to use provided they are appropriate to the scaffolding being erected. For scaffolds that fall outside the scope of these standard designs, a bespoke design will be required. If a bespoke design is required then a competent scaffold designer must be engaged to design the scaffold. Copies of manufacturers' instructions for system scaffolds and drawings for "designed scaffolds" shall be held by those building the scaffolds and by the person inspecting the scaffold.

Persons involved in the erection or dismantling of scaffolds must wear a safety harness at all times, with the lanyard secured to a suitable anchor point in accordance with a written method statement and risk assessment. 100% tie off is required at all times.

Permanent handrails shall not be used as load bearing supports for scaffolds.

ESB scaffolds shall be used by the Contractor only with the permission of the Work Controller.

When scaffolds are used particular attention should be given to maintaining the scaffold in a clean and tidy manner to reduce the risk of falling objects to a minimum.

#### 16.3 Mobile Tower Scaffolds

A mobile tower scaffold is defined as one that:

- Is capable of being used free standing,
- Has one or more working platform.
- Is assembled using prefabricated components,
- Has its dimensions fixed by design,
- Has normally four legs with at least four castors,
- Is stable, by supports on the ground and if necessary by support to a vertical construction by a wall strut.

Persons engaged in the erection, modification or dismantling of such scaffolds shall hold SOLAS Construction Skills Certification Cards for mobile tower scaffolds, or a recognised equivalent.

All mobile tower scaffolds must be inspected by a competent person employed by the Contractor when first brought into use, following modification or exposure to bad weather, and within the previous seven days while in use. A written record of all inspections must be maintained on the appropriate statutory form GA3 or an equivalent.

All mobile tower scaffolds must bear a Scafftag type "DO NOT USE" holder during construction, when being dismantled and when not in use. A properly completed green Scafftag type inspection tag shall be inserted into the holder when the scaffold is in use.

It is recommended that you do not attach safety harness lanyards to mobile scaffold towers.



# 16.4 Suspended Access Equipment

Suspended access equipment shall comply with BS 5974 Code of Practice or equivalent for temporarily Installed Suspended Scaffolds and Access Equipment and with BS EN 1808 Safety Requirements on Suspended Access Equipment – Design Calculations, Stability Criteria, Construction – Tests or equivalent.

See ESB SSoW Instruction GT-SSoW-I-038 'Working At Height' for further information.

#### 17. HOT WORK

#### 17.1 Hot Work Controls Document

A Hot Work Controls Document is required for any work involving:

- Risk of ignition of an explosive atmosphere within a vessel or pipe having contained combustible/flammable substances.
- Risk of ignition of nearby combustible/flammable material leading to a fire.
- Risk of creation of an incipient or dormant ignition source that may remain unnoticed immediately after work has ceased but which may result in a fire some time later.
- Hot Work within a Confined Space.

Typical ignition sources include gas welding and cutting, electric welding, the use of blowtorches, grinding and certain high heat lighting sources.

#### 17.2 Avoidance of Hot Work

Where practical, Hot Work should be moved to a location where no fire risk is created. Hot Work that has the potential for significant fire risk should be undertaken only when all other possible alternative methods have been investigated and found to be unreasonable. Hot Work shall not be carried out in an explosive atmosphere.

# 17.3 Nearby Combustible Substances

Before work commences, every reasonable effort shall be made to clear combustible materials from the area in which Hot Work is to be carried out. Where the combustible materials cannot be removed, they should be protected by non-combustible blankets, screens or some equally effective method.

# 17.4 Gaps in Flooring

Particular care needs to be taken to ensure that any gaps in flooring (e.g. open grid flooring) are adequately covered so that sparks cannot fall onto people, into concealed spaces or onto combustible material.

#### 17.5 Metal Bins

The hot stub ends of welding rods and any slag should be disposed of in a safe manner, ensuring that they do not come into contact with combustible materials. A metal bin containing sand, or similar, should be provided for this purpose.



#### 17.6 Solvents

Care should be taken when flammable solvents have been used prior to Hot Work occurring. Vapours from such solvents can create an explosion or fire risk. Also, when heated, most non-flammable solvents produce narcotic or toxic vapours. Any solvents should therefore be allowed to evaporate and clear from the air before hot work commences. The safety precautions identified in the appropriate Safety Data Sheet shall be followed.

# 17.7 Firefighting Equipment

The contractor shall ensure that Firefighting equipment appropriate to the risk is accessible for use within a reasonable distance. Persons involved in the Hot Work shall be trained in the use of the appropriate firefighting equipment. The contractor is responsible for providing and maintaining a sufficient number of fire extinguishers as is appropriate to the scope of the work they are carrying out.

#### 17.8 Two Persons Present

Where Hot Work presents a significant fire risk the use of two or more competent trained persons shall be considered as a Control Measure.

# 17.9 Plant Containing Combustible Material

Where Hot Work is being carried out on Plant having contained combustible or flammable liquid/gas, Control Measures shall be applied to ensure that a flammable or explosive atmosphere is not created by the Hot Work process. Depending on the circumstances this may be achieved by cleaning, inerting or ventilating.

# 17.10 Follow-up Inspections

Upon completion of Hot Work and at the end of each work period, a thorough examination shall be made in the immediate area to ensure that all sources of ignition have been extinguished and made safe. Periodic inspections shall be carried out for a subsequent period appropriate to the fire risk. Such inspections are the responsibility of the Contractor unless otherwise agreed with the Work Controller.

# 17.11 Gas welding and Cutting Equipment

Gas welding/cutting equipment must be in safe working condition, in particular:

- 1. Hoses must be in good condition, correctly colour coded and free from cracks and other defects.
- 2. Hoses must be connected to fittings by proprietary "one-shot" type clips; "jubilee clips" are prohibited.
- 3. Oxygen and acetylene/ Propane hoses must be fitted with check-valves and flash-back arrestors.
- 4. Oxygen regulators must be rated for an inlet pressure of at least 230 Bar.
- 5. If an acetylene cylinder becomes hot or starts to vibrate, you must evacuate immediately and call the emergency fire services
- 6. Cylinders must be fitted with knobs or keys to allow the outlet valve to be turned off in an emergency. This shut off must remain in place for the duration the cylinder is in use.



- 7. Bottles to be turn off at the neck and hose lines should be relaxed after use
- 8. Gas cylinders (including empty cylinders) must be stored, transported and used in the upright position and secured against falling.
- 9. Only regulators fitted with pressure gauges to accurately assess pressures are permitted for use on ESB sites.

Gas welding and cutting equipment cylinders are not permitted in confined spaces.

When equipment is not in immediate use, cylinder valves must be closed and hoses tidied away. Additionally, cylinders shall be stored away from sources of ignition/mechanical damage and in an adequately ventilated location.

# 17.12 Electrical welding equipment

Electric welding equipment must be in a safe working condition, in particular:

- 1. Welding leads and return cables must be of adequate cross section with continuous insulation over their entire length.
- 2. Joints between cable sections must be by means of proprietary shrouded insulated cable couplings.
- 3. The welding return cable must be connected to the work piece by means of a proprietary clamp. The welding return must not be made by connecting to steelwork or by any path other than the proper welding return lead.
- 4. The welding set itself must be earthed through the main supply cable.
- 5. Welding set main supply cables must be armoured.
- 6. The main point of electrical supply must be fitted with a switch.

Electric welding sets are not permitted in confined spaces.

# 17.13 Tarpaulins and temporary flexible sheeting

Tarpaulins and temporary flexible sheeting materials shall be flame retardant to UK Loss Prevention Certification Board Standards "LPS 1207 Fire Requirements for the LPCB Approval and Listing of Protective Covering Materials", "LPS 1215 Requirements for the LPCB Approval and Listing of Scaffold Cladding Materials" or equivalent standards.

See ESB SSoW Instruction GT-SSoW-I-031 'Hot Work' for further information.



# 18. DIGGING/EXCAVATIONS

An Excavation Controls Document is required for any work involving:

- 1. Excavations in excess of 0.2m.
- 2. Excavations in areas suspected of having underground services.

Excavations shall be inspected by a competent person when in use by persons at work:

- a) At least once in every day.
- b) At the commencement of every working shift for excavations more than 2 metres deep.

No person may be permitted to work in any excavation unless a thorough examination has been carried out by a competent person within the immediately preceding 7 days. The results shall be recorded on the Approved Form (AF3) or equivalent.

All excavations shall be secured against collapse.

Access to excavations shall be barriered off using rigid mesh fencing or similar and safety signs (plastic tape or rope is not an acceptable alternative). Where vehicles approach the excavation, brightly painted stop-blocks shall be used to prevent over-running the excavation edge and the need for extra support at the sides of the excavation shall be assessed. Unnecessary vehicles shall be kept a minimum distance of the depth of the excavation away from excavations wherever possible. The area, including warning barriers, shall be adequately lit at night.

Unless not reasonably practicable, hand power tools shall not be used within 0.5m of marked position of electricity cables. Suitable cable locating devices should be used in conjunction with the cable plans to determine as accurately as possible the position of underground cables in or near the proposed work area. Before using a mechanical excavator near buried electrical services, trial holes should first be excavated by hand digging and the depth of electrical cables at the point of work shall be established. The excavator shall not be operated within a radial distance of 0.3m from the cables.

See ESB SSoW Instruction GT-SSoW-I-032 'Excavations' for further information.



#### 19. STORED ENERGY

Stored Energy is Energy maintained in Equipment after it has been Isolated and it can be system derived or general workplace safety derived.

Stored Energy may be identified by the Work Controller or Safety from the System Coordinator. Actions to deal with Stored Energy can be identified on the Permit or on a separate Stored Energy Controls Document.

See ESB SSoW Instruction GT-SSoW-I-030 'Stored Energy' for further information.

#### 20. WORK WITH HAZARDOUS SUBSTANCES

The Contractor's Permit Holder must advise the Work Controller of all hazardous substances intended for use, and any hazards posed to personnel, Plant or the environment by such substances. A Hazardous Substances Controls Document is required for any work involving hazardous substances. Extended Safety Data Sheets (eSDS) must be provided for all hazardous substances and appropriate precautions put in place, based on risk assessment, to ensure the safety of those who could be affected by their use. ESB reserve the right to refuse the use of chemical products containing certain risk and/or safety phrases. All chemical products brought to site must be approved by ESB.

Occupational exposure levels shall not exceed those set down in the latest HSA Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations/The HSE EH40/2005 Workplace Exposure Limits containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations 2002 (as amended) or the relevant Safety Data Sheet (whichever is lower).

Flammable, explosive and toxic substances may only be brought into the station with the permission of the Work Controller. All such material must be stored in accordance with the SDS in an agreed location, with an inventory of chemical products kept up to date and available on site. The Contractor shall ensure that only minimum quantities are stored at any one time. All hazardous chemical products brought to site shall carry Classification, Labelling and Packaging (CLP) Regulation compliant labelling to indicate hazards. The Contractor shall erect suitable fire or explosion risk warning signage at the storage location.

Category 1, 2 or 3 Carcinogens may only be used subject to the following conditions:

- 1. Written approval has been obtained from the Work Controller.
- 2. A job specific written risk assessment indicates that there is no safer alternative.
- 3. A job specific written method statement for the substance concerned, based on risk assessment, has been drawn up and approved by a competent person employed by the Contractor.



4. The exposure to personnel has been reduced to a level that is as low as is technically possible, and never exceeding the appropriate Occupational Exposure Limit, by the use of sealed systems or other engineering controls.

Asbestos and products containing asbestos are prohibited. Where Equipment within the Contractor's scope of supply is being installed, the Contractor shall demonstrate by means of a design risk assessment or some similar means that the equipment is asbestos free.

See ESB SSoW Instruction GT-SSoW-I-037 'Hazardous Substances' for further information.

#### 21. REACH COMPLIANCE

As of 1st December 2012 all Safety Data Sheets/Extended Safety Data Sheets (SDS/eSDS) submitted for use in ESB must comply with EU Registration Evaluation Authorisation and Restriction of Chemical products (REACH), and Classification, Labelling and Packaging (CLP) Regulations.

The date of issue/revision date must be given on the first page of the SDS. All pages should be numbered.

Any supplier who is required to prepare a Chemical Safety Report must attach the relevant Exposure Scenario, if required, in an Annex to the safety data sheet forming extended Safety Data Sheet (eSDS).

#### 22. WORK WITH ASBESTOS

All asbestos removal works require an Asbestos/MMMF/Heavy Metals Controls Document from the Work Controller. An Asbestos/MMMF/Heavy Metals Controls Document is also required where the presence of Asbestos is suspected. Only competent, trained persons may remove asbestos.

Asbestos is classified as toxic and as a Category 1 Carcinogen. Inhalation of asbestos fibres may cause cancer.

The use of asbestos products for new applications is banned under Irish Safety Legislation. Products containing asbestos shall not be brought on to ESB sites.

Old asbestos products can exist in Generating Stations in a number of possible forms, for example:

- 1. Asbestos insulation.
- 2. Sprayed asbestos (e.g. on structural steelwork).
- 3. Asbestos insulation board.
- 4. Roofing felt containing asbestos.
- 5. Asbestos coatings to metal wall cladding.
- 6. Asbestos cement products such as corrugated sheeting and pipes.
- 7. Asbestos floor tiles, roof tiles and ceiling tiles.
- 8. Buried asbestos waste.
- 9. Asbestos joints/gaskets on pipework flanges, pumps, compressors, internal combustion engines and similar equipment.



- 10. Asbestos packing on valves and pump glands.
- 11. Asbestos brake linings on vehicles and on hydro-station turbines.
- 12. Asbestos arc chutes on high voltage switchgear.

The locations of known asbestos and products containing asbestos are recorded in the station's Asbestos Register. Where the Contractor is working in an area known to contain asbestos the Work Controller shall inform the Contractor Permit Holder and make available the relevant information from the asbestos register.

Where asbestos is suspected or encountered during work, all activities directly connected with this work must cease immediately, persons must be withdrawn and the Work Controller must be informed. The Work Controller shall assess the type and form of asbestos involved.

Where asbestos is known or assumed, all work must be carried out in accordance with relevant legislation.

#### 22.1 Low Risk Asbestos Removal

Where small quantities of asbestos gaskets, rope, valve packing, gland packing, floor tiles, roof tiles (but not ceiling tiles), asbestos cement products and similar lower risk asbestos products are involved in the work to be undertaken, the Work Controller shall advise on the necessary arrangements for its removal. The Contractor shall review the site asbestos survey/asbestos register where applicable. The Contractor shall inform the Work Controller of the locations and quantities of all asbestos removed to facilitate updating of the asbestos register.

# 22.2 Specialist Asbestos Removal Operations

Work involving the removal of asbestos insulation, sprayed (limpet) asbestos, asbestos insulation board, asbestos ceiling tiles and similar higher risk asbestos products is classified as high risk work and is notifiable to the HSA. Work with higher risk asbestos products can result in airborne fibre levels reaching or exceeding the Exposure Limit Value of 0.1 fibres/ml. Strict precautions must therefore be observed in compliance with the relevant legislation.

Such work shall only be carried out by specialist asbestos removal Contractors taking into account any considerations as may be imposed by ESB. The Contractor shall inform the Work Controller of the locations and quantities of all asbestos removed to facilitate updating of the asbestos register.

See ESB SSoW Instruction GT-SSoW-I-040 'Asbestos / Man Made Mineral Fibres / Heavy Metals' for further information.

# 23. WORK WITH REFRACTORY CERAMIC FIBRE, VITREOUS FIBRE INSULATION AND SIMILAR PRODUCTS

Refractory Ceramic Fibre is toxic and is classified as a Category 2 Carcinogen. Inhalation of Refractory Ceramic Fibres may cause cancer. All work involving this material require an Asbestos/MMMF/Heavy Metals Controls Document from the Work Controller. This material may only be used subject to the following conditions:

- 1. Written approval has been obtained from the Work Controller.
- 2. A written risk assessment indicates that there is no safer alternative.



- 3. A job specific written method statement, based on risk assessment, has been drawn up & approved by a competent person employed by the Contractor. This shall include provisions for waste disposal.
- 4. The exposure to personnel has been reduced to a level that is as low as is technically possible, and never exceeding the appropriate Occupational Exposure Limit, by the use of sealed systems or other engineering controls.
- 5. Appropriate safety signs or tags are fixed to the points where the material is installed.

#### 23.1 Work with Vitreous Fibre Insulation and Similar Products

Certain types of Vitreous Fibre Insulation (e.g. Rockwool) are classified as Category 3 Carcinogens. All work involving this material require an Asbestos/MMMF/Heavy Metals Controls Document from the Work Controller. Generally, Rockwool is not considered to be a Category 3 carcinogen, however as a precaution ESB require the following control measures to be applied when working with this and other types of Vitreous Fibre Insulation:

- 1. Only Vitreous Fibre Insulation and Calcium Magnesium Silicate Insulation without an R40 Classification may be used for new applications.
- 2. Dust masks (protection factor of FFP3 to EN 149) and general purpose gloves shall be used.
- 3. A Tyvek or equivalent disposable boiler suit with hood (dust mask to be worn outside the hood) shall be worn where a significant amount of handling is involved. Where handling is not significant, standard overalls may be worn in place of a disposable boiler suit. These shall be washed after use. Skin (e.g. arms) should not be exposed unnecessarily.
- 4. Where a risk of dust fibres entering the eye exists, goggles shall be worn. This applies particularly to overhead work.
- 5. Where old lagging is being stripped, this shall be dampened down sufficiently to prevent dust generation before stripping is started and kept damp throughout the process.
- 6. The floor of the work area shall be covered with appropriate sheeting.
- 7. The work area shall be cordoned off with rigid barriers from the point of work and designated with "wear dust mask" safety signs.
- 8. Only tools and work methods that generate the least possible amount of airborne fibres and dust may be used.
- 9. Smoking, eating and drinking shall be prohibited in the work area.
- 10. The work area shall be cleaned up at regular intervals. When cleaning floor areas & similar surfaces, wet sweeping methods shall be applied, never dry. A vacuum cleaner where being used shall be a Type H to BS 5415 & have a high efficiency particulate arrestor (HEPA) filter.
- 11. The area shall not be blown down with compressed air, or dust raised unnecessarily.
- 12. Appropriate washing/changing facilities shall be made available to those involved in the work.

See ESB SSoW Instruction GT-SSoW-I-040 'Asbestos / Man Made Mineral Fibres / Heavy Metals' for further information.

#### 24. WORK WHERE HEAVY METALS ARE DISCOVERED

Oxides of nickel (NiO) and chromium (Cr2O6) are carcinogens (C2).



Oxides of vanadium (V2O5) are irritants and sensitizers and can cause bronchial symptoms and skin dermatitis.

Exposure to high levels of airborne, oral or dermal hexavalent chromium compounds is associated with

increased risk of lung cancer and other adverse health effects.

Lead is a reproductive toxin and has a binding OELV.

A local written procedure for work where nickel, vanadium or chromium oxides, hexavalent chromium or lead may be present shall be produced prior to such work being carried out. An Asbestos / Man Made Mineral Fibres / Heavy Metals Controls Document shall be obtained from the Work Controller.

See ESB SSoW Instruction GT-SSoW-I-040 'Asbestos / Man Made Mineral Fibres / Heavy Metals' for further information.

# 25. WORK IN EXPLOSIVE ATMOSPHERES (ATEX/DSEAR) RISK AREAS

All work within an ATEX/DSEAR Control Area, mechanical or electrical, requires an Explosive Atmosphere Controls Document from the Work Controller.

Areas with an explosive atmosphere risk are designated "ATEX/DSEAR Control Areas" and are identified by safety signs. Such signs identify the explosive risk (e.g., methane, hydrogen, coal dust) and whether a zoned area is present (Zone 0, 1, 2, 20, 21 or 22).

Prior to issuing an Explosive Atmosphere Controls Document the Work Controller shall Verify that Control Measures, as appropriate from the following list, are in place:

- Hot Work Controls Document.
- Purging, Venting and Forced Ventilation.
- Gas Free Certificate and continuous gas monitoring.
- Spark Proof Tools and ATEX/DSEAR rated test equipment.
- Firefighting and emergency procedures.
- Removal of ignition sources.
- Isolation requirements.
- Consultation with ATEX/DSEAR control engineer and ATEX/DSEAR documentation.

Work on ATEX/DSEAR equipment shall only be carried out by competent persons in compliance with ESB Standards, Guidance Documents and Procedures.

Where an area has been temporarily de-zoned in compliance with ESB Standards, Guidance Documents and Procedures an Explosive Atmosphere Controls Document is not required.

See ESB SSoW Instruction GT-SSoW-I-041 'Work in Explosive Atmosphere Areas' for further information.



#### 26. RADIOGRAPHY

All radiography work requires an Ionising Radiation Controls Document from the Work Controller.

Radiography shall only be carried out when authorised by the Ionising Radiation Coordinator following implementation of control measures to minimise exposure of persons to radioactive sources. Control measures shall include putting in place an exclusion zone, erection of warning signage and advising all other affected persons, and those others identified by the Work Controller. There may be a requirement to carry out such work outside of normal working hours.

See ESB SSoW Instruction GT-SSoW-I-042 'Radiological Safety - Non-Destructive Testing (NDT)' for further information.

#### 27. WORK ON OR ADJACENT TO WATER

Where the Work Controller determines there is a risk of falling into water and being drowned or injured then a Work on, near or over Water Controls Document shall be issued for the work.

All contractor staff regularly involved in work on or over water shall attend an Approved immersion course.

#### 27.1 Work Near an unguarded Waters Edge

The following applies to work being carried out within 3 metres of the unfenced edge of jetties, dams, and other locations, where an identifiable risk of a person falling into water exists, or in situations where persons wade into fast moving water or water of depth greater than 0.3 metres:

- a) A safety harness fitted with a fall restraint lanyard attached to a secure anchor, OR a lifejacket, shall be worn at all times. Where determined by Risk Assessment, a retractable fall arrest system may be used on sloping banks.
- b) Where work is to be carried out, lifebuoy(s) with rope shall be available on the spot.
- c) A person carrying out the work shall be accompanied by at least one other person.
- d) Emergency procedures shall take into account the need to raise the alarm quickly in the event of an incident.
- e) Care shall be taken where edges are slippery. Non-skid surfaces should be provided, if reasonably practicable.
- f) Work areas shall be maintained in a tidy condition.
- g) Work during darkness should be avoided. However, where such work is essential, the work area and immediate water surface shall be well illuminated with lights.
- h) Movement of vehicles shall be strictly controlled.

If a significant risk exists of a person falling into water, a rescue boat shall be present at all times in the water at the work location, with competent boat operators available at all times at the work location.

#### 27.2 Work on Water

The following provisions apply to work being carried out from floating apparatus:



- a) A competent boat operator shall be aboard and in charge of a boat or craft when not moored. Persons shall be designated as competent boat operators only if they have attended an Approved training course and been assessed as having a satisfactory level of expertise. Boat operators shall also be competent in identified rescue operations
- b) Lifejackets shall be worn at all times.
- c) A person carrying out work shall be accompanied by at least one other person. This provision does not apply to competent boat operators while patrolling or in transit.
- d) Provision shall be made for raising the alarm quickly in the event of an incident.
- e) Waders shall not be worn.
- f) All floating apparatus shall be:
  - i. Equipped with rope, safety flares, lights and radio / phone and at least one lifebuoy with rope.
  - Of an approved type and design, shall not be overloaded, shall be suitable for the intended duty, and shall have its condition checked prior to use by a competent person.
  - iii. Sufficiently stable in anticipated conditions to allow recovery of a man overboard.
- g) The stability of pontoon assemblies shall be pre-calculated by a competent person. Assembly and stabilisation shall be carried out in the shortest possible time. When assembled, they shall not be capable of being rendered unstable due to movement of persons or equipment, and shall be fitted with guard rails, where reasonably practicable. Where a partly assembled pontoon is left unattended, the entrance shall be cordoned off with a rigid barrier. Pontoon surfaces shall be non-skid.
- h) Persons making journeys by boat shall inform others of their expected departure and arrival times so that the alarm can be raised in the event of them not reaching their destination on time.

See ESB SSoW Instruction GT-SSoW-I-034 'Diving and Work On, Near or Over Water' for further information.

#### 28. DIVING OPERATIONS

Where diving operations are carried out, the Work Controller shall fulfil the role of the "Relevant Person" under legislation. The Diving Contractor fulfils the role of the "Employer of Divers".

Prior to allowing a diving operation to take place, the Work Controller shall:

- Brief the Diving Supervisor on what is under the water, what work they are required to perform and on how the area has been made safe for the dive.
- Ensure that the Diving Contractor has completed, signed and handed over the Diving Declaration.

See ESB SSoW Instruction GT-SSoW-I-034 'Diving and Work On, Near or Over Water' for further information.



# 29. PARTICULARLY ENVIRONMENTALLY HAZARDOUS WORK ACTIVITIES

#### 29.1 Work On or Adjacent to Water

Only those materials required may be kept at the work-site where work is carried out on or adjacent to any open water. Drains leading to open water must be protected. Control measures, based on prior risk assessment and agreed with the Work Controller, must be taken to avoid spillages of any hazardous substances. Such work must not be carried out in darkness or within one hour of darkness unless the Work Controller has granted specific permission and appropriate precautions are taken.

#### 29.2 Work on Oil or Chemical Installations

Work on facilities containing bulk oil or chemicals, where a significant environmental risk exists, requires prior written risk assessment and appropriate control measures. Drain points to waterways must be protected throughout the work duration.

# 29.3 Air Heater and Boiler Washing

Wash water from air heaters or boilers must be contained, collected and appropriately treated using facilities available in the station, or by equally effective means supplied by the Contractor.

#### 29.4 Work on Drains

The Contractor must be familiar with the layout of relevant drainage networks and the location of emergency shut off vales before work commences.

# 29.5 Working with Ash

The procedure for work with ash shall be agreed with the Work Controller. Weather conditions during the work period shall be considered.



#### **CONTRACTOR DECLARATION**

No :

murcare "yes" or "N/A" for not applicable Yes N/A							Voc N/A	
Safety Statement has been submitted							Tes IVA	
Site specific safety and environmental Risk Assessments and Method statements will be submitted for all activities of a hazardous nature								
Current statutory inspection certs for all lifting machines, cranes, hoists, mobile work platforms, lifting tackle and air receivers are available for inspection on site								
All portable electrical tools are of the 110 volt type as per Section 12.2								
Safety Data Sheets for all chemical products intended for use will be submitted in advance to ESB for approval								
A list of proposed employees has been submitted or listed on a contract document								
A list of all sub-contractor they have they been made	de aware	of obligations	under Co	ntractor S	afety and Environn			
All persons in my contro								
All persons in my contro specific to the work local						vironm	ental hazards	
Safety Awareness Schen	ne Cards	(e.g. SOLAS	Safepass c	r equivale	nt) are valid for all	opera	tives	
<b>FETAC Construction Ski</b>	lls Cards	or equivalent	are valid f	or all relev	ant operatives			
Site specific safety & env	vironmen	tal emergenc	y plan will	be submit	ted to the Work Co	ontroll	er	
Equipment to deal with a	ın enviror	nmental incid	ent has be	en provide	ed			
Method of handling, segi								
All persons in my contro station's compliance wit	h its IPPO	CL licence or	Co. Counc	il permit/li		tion to	ensuring the	
Have copies of insurance	e certifica	ates been sub	mitted to E	SB?				
Other Requirements as s	specified	by the Work (	Controller :					
Are any of the following	Are any of the following activities being carried out on site? (Please tick the boxes)							
Work on / near water Work on / near drains Work with fuel, oil, chemical plant							mical plant	
Working with Ash	Ai	irheater / Boil	er Washin	<b>1</b>	Other:			
Detailed method stateme					significant activitie	s sele		
What environmental significant prod Oil: Paint:		oducis does	Diesel:		Lagging: Aerosol:			
Chemicals:	Coolar	-4-	Cement		Other:		Other:	
	Coolai	it.	Cement	•	Other:		Other:	
If other please specify:								
What waste types will the			(Please tie		t boxes and includ			
Batteries:	Diesel				Soil:		etronic	
		ontaminants:			Paper:		ss:	
Waste Oil: Cement:					ost:	Lamps:		
Boiler Wash: Plastic: Paint Tins Metal:					Timber:		osol Cans:	
Paint Tins					eral Refuse:			
Chemicals: Lagging: Dust:								
Other (Hazardous): Other (non Hazardous):								
If other waste types please specify:								
Company name:								
Contact Person:  Telephone: E-mail:								
•						1 11 1 2		
I declare I have read and understood the Contractor Safety and Environmental Regulations, and all information								
provided at this date is accurate and understood. I understand that this Declaration is valid for ONE YEAR from the date entered below and must be renewed annually.								
Signed By:	Signed By:							