



Procedure for Personal Protective Equipment

AZSPU-HSSE-DOC-00061-2

This number supersedes UNIF-HSE-PRO-156-C1

Authority:	AzSPU Safety & Compliance Systems Manager	Custodian:	HSE Systems / CoW Adviser
Scope:	AzSPU	Document Administrator:	MS Documents Coordinator
Issue Date:	22 October 2006	Issuing Dept:	Safety & Compliance Systems
Revision Date:	17 September 2009	Control Tier:	2
Next Review Date:	17 March 2011		



PPE SAFETY SIGNS

TABLE OF CONTENTS

1	PURPOSE / SCOPE.....	4
1.1	PURPOSE.....	4
1.2	SCOPE.....	4
2	DEFINITIONS	5
3	GENERAL REQUIREMENTS	5
3.1	LEGISLATION & STANDARDS.....	5
3.2	COMPANY REQUIREMENTS	5
3.3	STOPPING UNSAFE WORK	5
3.4	DEVIATIONS	6
4	KEY RESPONSIBILITIES	6
4.1	SITE MANAGER (SM) / SITE CONTROLLER (SC) / OFFSHORE INSTALLATION MANAGER (OIM)	6
4.2	H&S MANAGER	6
4.3	AREA AUTHORITY (AA).....	6
4.4	PERFORMING AUTHORITY (PA).....	7
4.5	BP EMPLOYEES.....	7
4.6	CONTRACTORS	7
5	REQUIREMENTS & PRACTICE FOR PERSONAL PROTECTIVE EQUIPMENT.....	7
5.1	WHOLE BODY PROTECTION.....	7
5.1.1	General Duties – Fire Protective Clothing	7
5.1.2	Inherently Fire Resistant Clothing (IFRC).....	8
5.1.3	Fire Retardant Clothing (FRC)	8
5.1.4	100% Untreated Cotton.....	8
5.1.5	Adverse Weather Duties (Jackets & Over Trousers).....	8
5.1.6	Chemical Handling	9
5.2	HAND PROTECTION	9
5.2.1	Chemical Handling	9
5.2.2	Electrical Work	9
5.2.3	Welding & Cutting	9
5.3	HEAD PROTECTION	9
5.3.1	Safety Helmet Use	9
5.3.2	Safety Helmet Care and Handling.....	10
5.3.3	Alternative Headwear	10
5.4	FOOT PROTECTION.....	10
5.4.1	General Duty Boots.....	11
5.4.2	Chemical Resistant Boots	11
5.4.3	Inspection & Replacement	11
5.5	EYE PROTECTION.....	11
5.5.1	Glasses.....	11
5.5.2	Goggles	11
5.5.3	Face Shields	12
5.5.4	Combinations	12
5.5.5	Contact Lenses	12
5.6	HEARING PROTECTION	12
5.6.1	Ear Plugs.....	13
5.6.2	Ear Muffs.....	13
5.7	FALL-ARREST EQUIPMENT / SAFETY HARNESSSES.....	14
5.8	LIFE JACKETS & BUOYANT WORK VESTS	14
5.8.1	Life Jackets.....	14

5.8.2	Buoyancy Work Vests.....	14
5.9	RESPIRATORY EQUIPMENT	15
5.9.1	Categories of Respiratory Equipment.....	15
5.9.2	Equipment Selection.....	15
5.9.3	Equipment Care.....	15
5.9.4	Filter Respirators.....	15
5.9.5	Breathing Apparatus.....	16
5.9.6	Air Line Masks	16
5.9.7	Self-Contained Compressed Air Breathing Apparatus.....	17
5.9.8	Smoke Hoods	17
5.10	SPECIAL PPE.....	17
5.10.1	Fire fighting PPE	17
5.10.2	Close Proximity Suits	18
5.10.3	Horse Patrol PPE.....	18
5.11	STORAGE REQUIREMENTS	18
5.12	VISITOR REQUIREMENTS.....	18
6	KEY DOCUMENTS / TOOLS / REFERENCES.....	19
6.1	KEY DOCUMENTS.....	19
6.2	REFERENCES.....	19
6.2.1	Industrial Standards	19
6.2.2	Access to Industrial Standards.....	20
7	APPENDIX B – PPE MATRIX.....	21

1 PURPOSE / SCOPE

1.1 PURPOSE

It is BP company policy that all employees and contractors working on BP owned or managed sites and installations shall be properly protected and clothed at all times. This document sets out the responsibilities and requirements for the issue and use of personal protective equipment, including the standards and specifications that personal protective equipment must meet.

Note:

Personnel Protective Equipment and Respiratory Protective Equipment (PPE & RPE) are seen as the last line of defence in the prevention of risk exposure and should not be considered as a substitute for eliminating or controlling the risks at source.

1.2 SCOPE

The contents of this procedure are applicable to all BP owned and managed sites / installations in Azerbaijan and Georgia. Contractors working on BP owned or managed sites / installations are also responsible for alignment with this procedure.

This document does not replace the procedures prepared and adopted by specialist contractors. Neither does it supersede any national regulatory requirements.

This procedure contributes to compliance with the “HSE expectations” contained in “getting HSE right”, the ‘Golden Rules of Safety’ and the Control of Work (CoW) standard that the Hazards associated with BP activities are identified and that the risks are assessed and managed.

All guidelines contained shall be regarded as the minimum requirements for BP owned or managed sites / installations in Azerbaijan and Georgia.

The scope covers defined activities of BP and Contractors at all BP AzSPU sites and installations.

Its contents cover the issue and use of personal protective equipment intended for:

- Whole body protection
- Hand protection
- Head protection
- Foot protection
- Eye and face protection
- Hearing protection
- Respiratory protection

Note:

The risks posed by any particular work task shall be assessed, and, where they cannot be fully engineered out, appropriate PPE shall be selected in accordance with the following:

- Gives adequate protection against risk(s) without itself leading to any increased / alternative risk exposure
- Suitability for the user
- Compatibility to the work task
- Complies with a recognized International standard

2 DEFINITIONS

Refer to document [AzSPU-HSSE-DOC-00021-2](#) HSE Definitions for definitions common to this procedure. Definitions specific to this Procedure are included below.

ALARP	As Low as Reasonably Practicable
L2RA	Level 2 Risk Assessment
TBT	Toolbox Talk
RPE	Respiratory Protective Equipment
FRC	Fire Retardant Coveralls
IFRC	Inherently Fire Retardant Coveralls
BS	British Standards
SCBA	Self Contained Breathing Apparatus
NFPA	National Fire Protection Act

3 GENERAL REQUIREMENTS

3.1 LEGISLATION & STANDARDS

This procedure complies with applicable national law. Applicable national law is national law as amended by project specific agreements, e.g. the ACG Production Sharing Agreement (PSA), and relevant International Conventions, if any, in force in Azerbaijan or Georgia, as applicable.

In the absence of national legislation, or where national legislation is inconsistent with the requirements of project specific agreements, BP Group Standards or applicable requirements from UK or US legislation will be complied with.

Where requirements conflict, legal advice has been obtained and a defensible compliance position adopted.

The standards and practices contained in this procedure are consistent with those internationally recognized within the petroleum industry.

3.2 COMPANY REQUIREMENTS

It is a company requirement that all tasks are subjected to an assessment of risk to demonstrate that risks have been reduced to as low a level as reasonably practicable (ALARP). This can be achieved by complying with the Company's existing standards. Where compliance with Company standards cannot reasonably be achieved, a formal level 2 Risk Assessment will be undertaken to identify any additional controls and demonstrate that risks remain as low as reasonably practicable. Whether by compliance with Company Standards or through level 2 Risk Assessment, the Company's Golden Rules of Safety must be complied with. Golden Rules are non-negotiable.

3.3 STOPPING UNSAFE WORK

To stop the continuation of potentially unsafe work at the earliest possible stage, the Control of Work (CoW) Policy and this procedure for Personal Protective Equipment make it very

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00061-2>>

Revision Date: 17 September 2009

Print Date: 2/1/2011

PAPER COPIES ARE UNCONTROLLED. THIS COPY VALID ONLY AT THE TIME OF PRINTING. THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND AT <http://docs.bpweb.bp.com/dkazspu/component/hssesms>

clear that all personnel are obliged and have the authority to “**STOP**” the work that they consider to be unsafe.

3.4 DEVIATIONS

This procedure is written in sufficient detail that it should be able to be applied consistently at all sites / installations. There may still be the requirement for some local rules covering site / installation specific logistical/administrative arrangements and local variations in responsibilities to reflect differences in organisational arrangements. These local rules should not deviate from the core processes within this document. Any form of deviation from this procedure, including but not limited to local rules, shall be requested and authorised in accordance with SSOW, Procedure for Deviations (Doc. No [AZSPU-HSSE-DOC-00011-2](#)).

4 KEY RESPONSIBILITIES

4.1 SITE MANAGER (SM) / SITE CONTROLLER (SC) / OFFSHORE INSTALLATION MANAGER (OIM)

The Site Manager / Site Controller / Offshore Installation Manager shall be responsible for application of this procedure in his area of responsibility. He shall ensure:

- That adequate number of Competent responsible persons are appointed to manage and maintain the requirements of this procedure
- Site / installation compliance with this safe System of Work
- That the personal protective equipment required for the safe undertaking of all work on the site / installation is available and in serviceable condition
- That visitors to the site / installation are wearing at least the minimum Personal Protective Equipment

4.2 H&S MANAGER

The H&S Manager is responsible for:

- Setting standards for type of Personal Protective Equipment
- Designating the required standards of equipment which can be used for each task
- Ensuring company training programmes include the use of approved PPE

4.3 AREA AUTHORITY (AA)

The Area Authority shall be responsible and accountable for the application of this procedure in his area of responsibility. He shall:

- Ensure that all personnel within his area of responsibility are supplied with the PPE that conforms with the requirements of the site regulations and, with the specific work activity that is being performed
- Ensure that all personnel required to wear PPE are trained and instructed on the correct use, maintenance and storage of the equipment issued to them

- Monitor work activities within his area of responsibility to ensure that personnel are wearing the correct PPE for the environment and work activities that they are involved with, as identified and determined from Risk or COSHH assessments

4.4 PERFORMING AUTHORITY (PA)

The Performing Authority shall be responsible for ensuring that the requirements of this procedure are adhered to for all operations within his area of responsibility. He shall be responsible for ensuring:

- All employees are properly equipped and wearing prescribed items of Personal Protective Equipment during the course of their work
- The review of activities for each task to determine the need for Personal Protective Equipment
- That intended items of Personal Protective Equipment are assessed for suitability by:
 - Identifying the risk with respect to a job or particular circumstances.
 - Establishing the characteristics and standards of the proposed Personal Protective Equipment.
 - Establishing the suitability of the equipment for the risk involved and for the personal characteristics of the user

4.5 BP EMPLOYEES

All BP employees will comply with this safe System of Work and will wear their Personal Protective Equipment whenever it is required by the task.

Employees shall ensure that all Personal Protective Equipment in their care is:

- Kept in a good condition (any defects shall be reported to the line supervisor)
- Cleaned as required.

4.6 CONTRACTORS

Contractors are responsible for the provision of all safety equipment (and any procedures required to maintain and their effective use in accordance with this Safe System of Work).

Contractor employees when working on BP sites and installations will comply with this Safe System of Work or equivalent (as set out in the contractors HSE plan, and endorsed by BP).

5 REQUIREMENTS & PRACTICE FOR PERSONAL PROTECTIVE EQUIPMENT

5.1 WHOLE BODY PROTECTION

5.1.1 General Duties – Fire Protective Clothing

Fire protective clothing shall be worn whenever the risk of exposure to flash fire warrants such. For Operators and Maintenance Technicians working in a hydrocarbon-processing

environment, Inherently Fire Resistant coveralls (IFRC) is specified. For others such as Pipeline and Terminal Operations (except for some specific activities) working in environments where the risk of flash fire is considerably lower, then Fire Retardant Clothing (FRC) may be acceptable. An alternative to FRC for the low flash fire risk applications is 100% cotton.

5.1.2 Inherently Fire Resistant Clothing (IFRC)

This term describes fibres or garment materials able to resist combustion without the aid of chemical additives or treatments. The fire/flame resistance is permanent. Inherent means that the fire resisting properties are an intrinsic property of the fire resistant fibres. This type of clothing will not burn, ignite or melt.

The type of coveralls recommended for AzSPU is Nomex Delta C one piece coverall of 93% Nomex, 5% Kevlar and 2% P-140 antistatic treatment. Its weight can vary from 160grams for the hottest environments through to 265grams for the coldest ones.

5.1.3 Fire Retardant Clothing (FRC)

This term describes fibres or garment materials subjected to treatment with chemical additives to aid combustion resistance. Such treated materials have no inherent fire resistant properties and rely on the additives treatment for fire resistance. The fire/flame resistance may deteriorate over time during cleaning, washing and normal wear and tear and the material may need to be re-treated for continued use. It should be noted that in a flash fire situation most garment's chemical treatment will be depleted, and the protection levels will probably not be sustained. This fabric is not recommended for Offshore or other similar applications with significant risk of flash fire.

5.1.4 100% Untreated Cotton

Lightweight, short sleeve cotton one piece coveralls may be used for tasks where high ambient temperature presents a problem and when there is minimal risk of flash fire or chemical exposure, such as inside accommodations, switch rooms, stores, Pipeline Operations, Terminal Operations (except for specific activities) and similar locations.

All Fire Protection Full Body Clothing should comply with *BS EN 531, 1995*.

Note: One piece coveralls shall be worn at all times within BP site facilities.

Where hot works operation sparks e.g. gouging, welding, cutting, grinding are carried out, coveralls trousers legs shall be worn over the protective footwear in order to prevent hot sparks from getting inside the boots.

5.1.5 Adverse Weather Duties (Jackets & Over Trousers)

These garments give protection against wind, rain, cold and some protection against splashing from liquids.

The garments shall meet the requirements of the General Duty clothing appropriate to the degree of risk defined.

Personnel employed in the production of hydrocarbons (including personnel involved in drilling operations, shall be issued with a jacket and over-trousers that satisfy *BS EN 533, 1997*.

5.1.6 Chemical Handling

Personnel handling chemicals need body protection against splashes and droplets. They shall wear protective clothing (suits or aprons) manufactured from materials conforming to *BS 7184, 2001*.

5.2 HAND PROTECTION

Hand Protection shall conform to *BS EN 420, 2007*. General-purpose gloves should only be used to provide warmth and to protect against minimal risk to health and safety, for example, to resist cuts and abrasions, repel some liquids and offers a good grip.

Gloves prevent many injuries when handling rough material or substances that can irritate the skin and should be worn whenever practicable.

Leather gloves that conform to *BS EN 388, 1994* should be worn when handling pipes and sheet metal work.

Approved safety gloves must be worn for specific types of exposure, especially:

- Chemical handling
- Electrical work
- Welding and cutting

5.2.1 Chemical Handling

Care should be taken when handling chemicals, which must not come into contact with the skin. PVC gauntlets for handling acid/alkalis should be worn (*BS EN 374, 1994*).

5.2.2 Electrical Work

Electrician's gloves shall be worn during electrical work (*BS EN 50237, 2000*).

Gloves shall be rated for the voltage of the equipment to be worked on (Doc. No: AZSPU-HSSE-DOC-00048-2).

5.2.3 Welding & Cutting

Heat resistant gloves shall be worn during welding and they shall conform to *BS EN 407, 1994*.

5.3 HEAD PROTECTION

5.3.1 Safety Helmet Use

Approved safety helmets (hard-hats), with chinstraps for use in high winds and at working at

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00061-2>>

Revision Date: 17 September 2009

Print Date: 2/1/2011

PAPER COPIES ARE UNCONTROLLED. THIS COPY VALID ONLY AT THE TIME OF PRINTING. THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND AT <http://docs.bpweb.bp.com/dkazspu/component/hssesms>

heights, shall be worn at all times in designated areas. Personnel shall wear safety helmets whenever they are:

- In process facilities
- Performing construction
- In any areas where an overhead hazard is/or could be present
- Outside designated areas when working on demolition and excavations, or where overhead work is undertaken.

The General Duties Helmet should conform to *BS EN 397, 1995*.

Note: Employees must inspect the helmet before each use following the inspection procedure for damage to the shell and integrity to the harness.

Warning: Gloves, cigarettes, earplugs or any other items should not be stored between the suspension and shell, as the space is needed to absorb the energy of an impact.

5.3.2 Safety Helmet Care and Handling

Only manufacturer's approved accessories can be used with helmets. No additions, alterations shall be made to any safety helmet. Paint, solvents or hydrocarbon type cleaners (for example, thinners, gasoline, kerosene) shall not be used on the helmet. These can seriously weaken the helmet materials in a way that may not be visible to the user. The helmet should be cleaned with a mild soap and warm water to help avoid skin irritation from contamination.

Helmets should normally be replaced at intervals recommended by manufacturer or when subjected to severe impact.

5.3.3 Alternative Headwear

The use of aluminium or metal helmets is not permitted. It is permissible to wear bump hats / caps for work in confined spaces where it is not practical to wear a helmet.

5.4 FOOT PROTECTION

Approved safety footwear shall be worn at all times in designated areas or work sites. Work boots with protective toe caps must be worn for all work conducted in working areas of:

- Offshore platforms
- Drilling rigs
- Terminals
- Construction sites
- Any other areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole.

Note: Boots with external steel toecaps shall not be used.

5.4.1 General Duty Boots

General duty boots shall confirm to *BS EN ISO 20345: 2004*. Conventional rig boots shall be the standard issue for general duty and helideck use. Local site management may authorize other industrial footwear.

5.4.2 Chemical Resistant Boots

Chemical resistant boots shall comply with *ISO 6110, 1992 and ISO 6111, 1982*.

5.4.3 Inspection & Replacement

The soles of **all boots** should be such that slipping on wet or oily surfaces is reduced. Boots shall be inspected on a regular basis to ensure they are in good condition. Boots shall be replaced when damage exposes the toecap, or before the sole is worn smooth.

5.5 EYE PROTECTION

Eye protection shall be worn on all onshore/offshore operational sites outside accommodation or office spaces and should conform to *BS EN 166, 2002, BS EN 167, 2002 and BS EN 168, 2002*.

5.5.1 Glasses

Spectacle-type safety glasses with side shields meeting recognised standards for industrial eyewear shall be worn as minimum protection.

If prescription safety glasses are required these shall be provided to BP employees by BP. Contractors must make their own arrangements for the supply of prescription safety glasses for their employees.

5.5.2 Goggles

Chemical splash goggles conforming to *BS EN 166, BS EN 167 and BS EN 168*, shall be used to provide full protection to the eyes and surrounding skin area against chemical splashes. They shall be worn:

- During chipping, striking or like operations
- While scraping paint, rust, scale or during similar operations
- When handling dry cement or powdered substances not chemically hazardous
- When painting with spray can or gun
- When blowing down parts and equipment with compressed air
- When handling hazardous chemicals

In addition, they shall be worn over corrective lenses:

- If those lenses do not meet recognised safety standards for industrial eye-wear
- During any of the operations listed above
- In all other cases when eye protective means do not properly protect.

5.5.3 Face Shields

Face shields shall be used to protect the face from sparks, **flashes** and flying debris during **the following activities (but not limited to):**

- Grinding operations
- Machining
- Buffing and sanding
- **Handling chemicals**

Face shields may also be used when handling hazardous chemicals but should not serve as a substitute for adequate eye protection (goggles). All face shields should comply with the BS EN 175, 1997.

5.5.4 Combinations

Face shields shall be worn in addition to proper chemical splash goggles during:

- Severe or heavy exposure to hazardous chemicals, heat and molten metal operations
- Heavy grinding, chipping or striking, **especially where these activities are carried out in confined space.**

5.5.5 Contact Lenses

Personnel wearing contact lenses require the same level of eye protection as those without contact lenses. However, the following potential hazards associated with contact lenses should be noted:

- In the event of a foreign body or chemical splash into the eye it may be difficult to remove the lens in order to effect satisfactory irrigation. Therefore medical assistance should be obtained
- Inflammation of the cornea caused by welding arc-eye may result in the contact lens sticking to the cornea. Contact lenses should be removed at the first sign of eye irritation, but if already stuck to the cornea, medical assistance should be obtained.

5.6 HEARING PROTECTION

In order to prevent damage to hearing by exposure to excessive or prolonged noise, noise levels have to be reduced to as low as reasonably practicable.

According to AzSPU Noise Management and Hearing Conservation Programme AzSPU-HSSE-DOC-00111-2 in areas and for tasks in which other controls have not reduced noise levels below 80 dB(A), hearing protection shall be worn:

- Single hearing protection: all employees and visitors present in areas, or conducting tasks, where noise is expected to exceed 80 dB(A) in the person's hearing zone, shall wear at least single hearing protection, i.e. either earplugs or earmuffs, approved by the BP Industrial Hygienist.
- Double hearing protection: all employees and visitors present in areas, or conducting tasks, where noise is expected to exceed 100 dB(A) in the person's hearing zone, shall wear double hearing protection, i.e. both earplugs and earmuffs, approved by the BP SPU Industrial Hygienist.

Hearing protection shall be worn as indicated regardless of exposure time or whether the person is enrolled in a hearing conservation program.

For more detailed information on noise action levels and the management of noise refer to AzSPU Noise Management and Hearing Conservation Programme [AzSPU-HSSE-DOC-00111-2](#).

Essentially there are two basic types of hearing protector: **ear plugs** and **ear muffs**.

5.6.1 Ear Plugs

Only disposable earplugs that comply with *BS EN 352, Parts 1 & 2, 1993*, shall be used on BP sites and installations. Disposable earplugs are designed to be thrown away after use in order to prevent hygiene concerns.

Disposable earplugs are compressed by rolling between the fingers and are then fitted into each ear by pulling the outer ear upwards to straighten the ear canal. The plugs subsequently expand to, and are held in place by, the shape of the ear canal.

Note: Earplugs are not likely to be suitable for persons suffering from any form of outer ear disease. If an individual has a history of disease or irritation of the ear canal, medical advice should be obtained on alternative forms of hearing protection.

5.6.2 Ear Muffs

Earmuffs consist of rigid cups that fit over the outer ear and are held in place by a neck spring or headband. Muffs are available that can be attached to a safety helmets and can be positioned out of the way when not required.

All earmuffs shall, as a minimum requirement, conform to *ISO 4869-1, 1990* and *CE pr EN 325-1, 325-3*.

The foam and cover around earmuffs should be checked visually each time before use and replaced on a yearly basis or if found to be damaged or contaminated.

5.7 FALL-ARREST EQUIPMENT / SAFETY HARNESSSES

When an individual is exposed to a fall of 2 metres or more, that individual is required to use fall arrest equipment designed to reduce personal injury in the event of a fall. All personnel working must use safety harnesses, lanyards or lifelines as an effective fall protection system when:

- At heights in excess of 2 metres
- Over the side
- Close to open hatches or roof edges, where fall prevention is not effective
- Inside a confined space (e.g. if deemed necessary in rescue plan)

Body harnesses shall comply with *BS EN 361, 1993*.

Inertial Reels and fall arrest blocks shall comply with *BS EN 360, 1993*.

For further details regarding the use of harnesses and fall arrestor equipment, refer to the following Safe Systems of Work:

- [AZSPU-HSSE-DOC-00013-2](#) Confined Space Entry
- [AZSPU-HSSE-DOC-00062-2](#) Scaffolding
- [AZSPU-HSSE-DOC-00065-2](#) Working at Heights

5.8 LIFE JACKETS & BUOYANT WORK VESTS

5.8.1 Life Jackets

Whenever there is a risk of falling into water personnel shall wear lifejackets that comply with the requirements of *BS EN 396, 1994* and *BS EN 399, 1994*.

Note: Aircraft and boat captains have complete authority on the need to wear lifejackets, and their instructions must be obeyed.

5.8.2 Buoyancy Work Vests

When the wearing of a lifejacket is impractical a buoyancy work vest shall be worn.

Work vests are specifically designed to provide extra flotation for safety and still allow complete mobility to workmen on or near the water. Work vest shall conform to *BS EN 393, 1994*.

5.9 RESPIRATORY EQUIPMENT

5.9.1 Categories of Respiratory Equipment

There are two categories of respiratory protective equipment:

- **Filter type respirators**, which provide air through a filter (Respirators)

Filter type respirators are unsuitable for atmospheres which are deficient in oxygen

- **Breathing apparatus**, which provides air from an un-contaminated source.

The type of respiratory protective equipment to be worn for type of task is specified in Appendix B – PPE Matrix

5.9.2 Equipment Selection

Personnel should select the correct respiratory protective equipment according to the nature and duration of the potential exposure. In particular, in order to select the correct type of respiratory equipment it is necessary to:

- Identify the respiratory hazards. For example, smoke or the products of combustion, dust or abrasion material, liquid particulate, gases or vapours from chemicals, solvents
- The concentration or combinations of the respiratory hazard(s) and the associated degree of toxicity
- The duration of the exposure.

Note: When selecting respiratory protective equipment, consideration should be given to potential face-fit problems, including the wearing of facial hair. Facial hair that interferes with a complete seal shall not be acceptable.

5.9.3 Equipment Care

Respiratory protective equipment must be inspected regularly, cleaned and stored as per manufacturer's instruction. Routine maintenance is necessary to ensure that the equipment is always in good working condition.

5.9.4 Filter Respirators

Note: It must be emphasized that respirators are only designed to afford protection against relatively low concentrations of toxic substances, and if there is doubt as to the correct level of protection that is required, then the higher level of

protection will be selected. This may mean that in certain circumstances a respirator is deemed to be inadequate and breathing apparatus is required.

Respirators shall comply with the requirements of *BS EN 529*, range in type from a simple disposable dust mask to a high performance full face mask with filters suitable for organic vapour, acid gas and dust (*CE/prEN 140, 1999*).

5.9.5 Breathing Apparatus

When the level of airborne contaminants is beyond the filtration capability of a respirator or where there is an oxygen deficiency, then Breathing Apparatus must be used.

The quality of air supplied through breathing apparatus shall conform to *BS EN 12021, 1999*.

The need to ensure continued provision of good quality breathing air relies on regular changing air filters and maintenance of dryers, backed up by periodical analysis of the breathing air supply.

5.9.6 Air Line Masks

Air-line breathing apparatus, which shall comply with *BS EN 139, 1995*, has a full-face mask that enables the wearer to work for long periods in harmful atmospheres. Breathing air for airline masks is supplied by one of the following systems:

- A battery of compressed air cylinders
- Portable air compressors fitted with reservoir air tanks.

Connections to the air-line mask hose are made via instantaneous bayonet spring couplings. These coupling must be kept in good condition and not used for any purpose other than supplying air to breathing apparatus.

Where no compressed air cylinders supply is available, portable air compressors with a reservoir air tank may be used. The air must be passed through suitable filters to remove excess moisture and oil mist. To ensure that an adequate supply of air is available and being received by the wearers, a person must be appointed who is responsible for checking the pressure in the air receiver, and to ensure the filters are functioning properly.

Note: Every system of air supply employed should incorporate a receiver of sufficient capacity to enable persons to escape from an irrespirable atmosphere in the event of a failure of the prime mover supplying the air.

5.9.7 Self-Contained Compressed Air Breathing Apparatus

Self-Contained Compressed Air Breathing Apparatus shall comply with the requirements of *BS EN 137, 1993*, and shall be provided:

- **For standard use** where a portable supply of air is required for a short period of time
- **For emergency use** at strategic points within hazardous areas (housed in prominent, easily recognised boxes or wall mounted containers).

The air for this apparatus is supplied under pressure either from compressed air cylinders carried by the wearer or from trolley sets. After use, the apparatus shall be serviced and fitted with a fully charged cylinder before being re-sited. Servicing must be done by an approved and competent person, and shall include the cleaning and decontamination of the face piece.

All persons required to use breathing apparatus must receive initial training and refresher training at intervals not exceeding six months. The training shall be recorded.

Note: All Self Contained Compressed Air Breathing Apparatus shall be inspected and the air pressures checked on a monthly basis.

5.9.8 Smoke Hoods

Smoke Hoods shall be:

- Provided on all offshore installations for emergency use within the sleeping accommodation
- In numbers not less than the total bed-spaces available on the installation
- Inspected monthly by Safety Officer or his designate.

5.10 SPECIAL PPE

5.10.1 Fire fighting PPE

Only inherently fire resistant clothing should be used as part of a fire-fighter's protective system and then only if they meet current standards for such clothing and equipment.

All cotton, poly/cotton, synthetic blends and fire retardant treated materials or garments are excluded from use for fire-fighter protective clothing.

As a minimum, fire-fighters should be provided with the following:

- Turnout Coat or Tunic should comply with BS EN 469, 1995
- Turnout Pants or Over-trousers should comply with BS EN 469, 1995

- Fire-fighter Boots should comply with BS EN 345, 1993
- Fire-fighter Gloves should comply with BS EN 659, 1996
- Fire Helmet (with integral neck and ear protection)BS EN 443, 1997
- Anti-Flash Hood (for wearing with Self Contained Breathing Apparatus)

5.10.2 Close Proximity Suits

A Close Proximity Suit is, typically, an aluminised one or two-piece garment that enables persons to approach close to a fire for a specific purpose such as valve closure, and it is not designed as turnout fire-fighting gear and should not be used as such. Close Proximity Suits should comply with NFPA 1976, 2000 standard.

5.10.3 Horse Patrol PPE

The following personal protective equipment is mandatory for use by BP Pipeline Horse Patrol personnel:

- Rider Helmet (for jockeys) – should comply with BS EN 1384, 1997
- Leggings against snake bites
- Saddle bags
- Flasks

5.11 STORAGE REQUIREMENTS

Storage of PPE is to comply with manufacturer's instructions.

5.12 VISITOR REQUIREMENTS

Any individual visiting BP facilities will be required to comply with that facility's PPE requirements.

As a guide, the Personal Protective Equipment that is necessary for all visitors includes, but is not limited to:

- Hard hat
- Safety glasses
- Safety boots
- Hearing protection
- Gloves
- Coverall - compliant with the requirements of this procedure.

Note: It is up to the discretion of the Site Manager / Site Controller / Offshore Installation Manager whether any additional Personal Protective Equipment will be required for visitors at the site, **or any dispensation can be given.**

Where dispensation from the current procedure is considered proper deviation process must be applied as described in Paragraph 3.4.

6 KEY DOCUMENTS / TOOLS / REFERENCES

6.1 KEY DOCUMENTS

This procedure shall, where appropriate, be used in conjunction with this suite of AzSPU Procedures referenced below.

Document Number	Title of Procedure
AZSPU-HSSE-DOC-00011-2	Procedure for Deviations
AZSPU-HSSE-DOC-00060-2	Procedure for Permit To Work
AZSPU-HSSE-DOC-00063-2	Procedure for Task Risk Assessment
AzSPU-HSSE-DOC-00111-2	Noise Management and Hearing Conservation Programme
AZSPU-HSSE-DOC- 00002-2	Procedure for Control of Work

6.2 REFERENCES

6.2.1 Industrial Standards

1. BS EN 531, 1995. Protective Clothing for Workers Exposed to Heat.
2. BS EN 533, 1997. Protective Clothing – Protection against Heat and Flame – Limited Flame Spread Materials and Material Assemblies.
3. BS 7184, 2001. Selection, Use and Maintenance of Chemical Protective Clothing – Guidance.
4. BS EN 420, 1994. General Requirements for Gloves.
5. BS EN 388, 1994. Protective Gloves against Mechanical Risks.
6. BS EN 374, 1994. Protective Gloves against Chemicals and Microorganisms. Part 1: Terminology and Performance Requirements. Part 2: Determination of Resistance to Penetration.
7. BS EN 407, 1994. Protective Gloves against Thermal Risks (Heat and/or Fire).
8. BS EN 397, 1995. Industrial Safety Helmets.
9. BS EN 345, 1993. Safety Footwear for Professional Use.
10. ISO 6110, 1992. Moulded Plastics Footwear – Lined or Unlined Poly Vinyl Chloride Industrial Boots with Chemical Resistance – Specification.
11. ISO 6111, 1982. Rubber Footwear – Lined or Unlined Rubber Industrial Boots with Chemical Resistance.
12. BS EN 166, 2002. Personal Eye Protection – Specifications.
13. BS EN 167, 2002. Personal Eye Protection – Optical Test Methods.
14. BS EN 168, 2002. Personal Eye Protection – Non-Optical Test Methods.
15. BS EN 175, 1997. Personal Protection – Equipment for Eye and Face Protection During Welding and Allied Processes.


16. BS EN 352, 1993. Hearing Protectors – Safety Requirements and Testing. Part 1: Ear Muffs. Part 2: Ear Plugs.
17. ISO 4869-1, 1990. Acoustics – Hearing Protectors. Part 1: Subjective Method For the Measurement of Sound Attenuation.
18. BS EN 361, 1993. Personal Protective Equipment against Falls from a Height – Full Body Harnesses.
19. BS EN 360, 1993. Personal Protective Equipment against Falls from a Height – Retractable Type Fall Arrestors.
20. BS EN 396, 1994. Lifejackets and Personal Buoyancy Aids – Lifejackets 150 NAMD 10068.
21. BS EN 399, 1994. Lifejackets and Personal Buoyancy Aids – Lifejackets 275 NAMD, 10067.
22. BS EN 393, 1994. Lifejackets and Personal Buoyancy Aids – Buoyancy Aids 50 NAMD 10066.
23. BS EN 4275, 1997. Guide to Implementing an Effective Respiratory Protective Device Program.
24. BS EN 12021, 1999. Respiratory Protective Devices – Compressed Air for Breathing Apparatus.
25. BS EN 139, 1995. Respiratory Protective Devices – Compressed Air Line Breathing Apparatus for Use with a Full Face Mask, Half Mask or a Mouthpiece Assembly – Requirements, Testing, Marking.
26. BS EN 137, 1993. Respiratory Protective Devices – Self-Contained Open-Circuit Compressed Air Breathing Apparatus.
27. BS EN 469, 1995. Protective Clothing for Firefighters – Requirements and Test Methods for Protective Clothing for Firefighting.
28. BS EN 345, 1993. Safety Footwear for Professional Use.
29. BS EN 659, 1996. Protective Gloves for Firefighters.
30. BS EN 443, 1997. Helmets for Firefighters.
31. NFPA 1976, 2000. Standard on Protective Ensemble for Proximity Fire Fighting Errata.
32. BS EN 1384, 1997. Helmets for Equestrian Activities.

6.2.2 Access to Industrial Standards

Electronic access to BS, API, ASME and other industrial standards is available through the following link:

http://technical_practices.bpweb.bp.com/

7 APPENDIX B – PPE MATRIX

Personnel Protective Equipment Matrix																
 Task / Position	Safety Glasses with side shields Face Shield Hard Hat with chin Welding Hood Air Supply Hood Safety Boots Coverall Working Gloves Welding Gloves Dust Mask Chemical Mask Winter Cloth Ear Plugs Chemical Goggles Safety Goggles Flotation Vest Welding Goggles Ear Muffs Half Face Respiratory Full Face Respiratory Medical Exam Gloves Leather Argon Gloves Half top leather High Visibility Jackets Rubber Gloves Steeltoe Boots Full Body Harness															
Heating Steel Upon Steel	✓		✓			✓	✓		✓		✓					
Grinding	✓	✓		✓		✓	✓				✓					
Sand Blasting					✓	✓	✓				✓					
Power Sawing	✓	✓	✓			✓	✓		✓		✓					
Laser Exposer																
Abrasive Cut-off Sawing	✓		✓			✓	✓				✓					
Chipping	✓	✓	✓			✓	✓				✓					
Electric Arc Welding				✓		✓		✓	✓							
Welder's Helper	✓			✓		✓		✓			✓					
Insulation Spraying	✓				✓		✓				✓					
Concrete breaking or Placing	✓		✓			✓	✓				✓			✓		
Corrosive acids or Alkaline		✓								✓			✓			
Machine Wire Brushing	✓	✓	✓				✓				✓					
Airborn Object in Shop	✓		✓				✓		✓		✓					
Wind & other air turbulence									✓					✓		
Working with coiled wire	✓		✓				✓				✓					
Mesh rolls or Banding materials	✓		✓				✓				✓					
Chemical areas		✓	✓		✓					✓			✓			
Gas Cutting				✓				✓							✓	
Carpenter	✓		✓				✓				✓					
Fabricator	✓	✓	✓					✓	✓		✓					
Steel Fixer	✓		✓				✓				✓					
Mason	✓		✓				✓				✓					
Dozer Operator	✓						✓				✓					
Excavator Operator Loader Operator	✓		✓				✓				✓					
Pipe Fitter	✓	✓	✓						✓		✓					
Plumber	✓		✓				✓				✓					
Tyreman	✓						✓				✓					
Helper	✓	✓	✓				✓				✓					
Millwright	✓		✓				✓				✓					
Steel Erector	✓		✓				✓				✓					
Steel Fabricator	✓	✓	✓					✓			✓					
Pipe Line Mechanical	✓		✓				✓				✓					
Electric Assistant	✓		✓				✓				✓					
Electrician	✓		✓				✓				✓					
Instrument Technician	✓		✓				✓				✓					
Ground Worker	✓		✓				✓		✓		✓					
Laundry Attendant																✓
Kitchen Worker									✓							✓
Driver	✓		✓				✓				✓					
Rigger	✓		✓				✓				✓					
Banksman	✓		✓				✓				✓				✓	
Manual Handler	✓		✓				✓				✓				✓	
Scaffolder	✓		✓				✓				✓					
Scaffolder Helper	✓		✓				✓				✓					
Storeman	✓		✓				✓				✓					
Mechanics	✓		✓				✓				✓					
Painter	✓		✓				✓				✓					
Site Doctor	✓		✓				✓				✓					
Nurse	✓		✓				✓				✓					
River Worker	✓		✓				✓				✓					✓
As Assessed by Noise Assessment																
For Every One Working Above 2 Meters (6 Feet)																

Revision/Review Log

Revision Date	Authority	Custodian	Revision Details
22 October 2004	AzSPU CHSSE Manager	Central Safety TL	Initial Issue
25 April 2008	Alan McNulty (AzSPU Central H&S Manager)	Abbas Islamov (Central Safety TL)	<p>General: Throughout the Procedure the document numbering for referred procedures has been changed from UNIF to AzSPU.</p> <p>Section 1. Introduction: 1.1 Purpose – wording changes; 1.2 Scope – wording changes.</p> <p>The following inclusions to Section 1 are: 1.3 Legislation & Standards; 1.4 Company Requirements; 1.5 Stopping Unsafe Work; 1.6 Deviations; 1.7 Document Review; 1.8 SSOW Specific Cross References; 1.9 Language Facilitation</p> <p>Section 2. Definition – is added.</p> <p>Section 3. Roles & Responsibilities: Changes made to Paragraph 3.1; 3.3; 3.4</p> <p>Section 6. Head Protection Changes made to Paragraph 6.1</p> <p>Section 8. Eye Protection Paragraph 8.2 – wording changes.</p> <p>Section 9. Hearing Protection – wording changes. Now Hearing Protection is fully based on the requirements of Noise Management and Hearing Conservation Programme regardless of exposure time.</p> <p>Section 10. Fall-arrest Equipment – wording changes.</p> <p>Paragraph 12.3 – wording changes</p> <p>Additional Appendices are added: Appendix B (PPE Matrix) Appendix C (Feedback and Improvement Suggestions)</p>

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00064-2>>

Revision Date: 17 September 2008

Print Date: 2/1/2011

PAPER COPIES ARE UNCONTROLLED. THIS COPY VALID ONLY AT THE TIME OF PRINTING. THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND AT

<http://docs.bpweb.bp.com/dkazspu/component/hssesms>

05 December 2008	Yuliy Zaytsev AzSPU Safety & Compliance Systems Manager	Adalat Mamedov (Central Safety TL	Authority position/name and custodian name have changed to reflect org changes in HSE&TD.
17 September 2009	Yuliy Zaytsev AzSPU Safety & Compliance Systems Manager	Niyaz Mamedov HSE Systems / CoW Advisor	<p>The numbering of the whole procedure is changed in accordance with requirements of Standardized Document Control Procedure Template (AzSPU-HSSE- DOC-00026-2).</p> <p>A new Note regarding the purpose of PPE was added to paragraph 1.1, <i>Purpose</i>;</p> <p>A new Note regarding PPE selection requirements was added to the paragraph 1.2, <i>Scope</i>;</p> <p>The Note in paragraph 5.1.4, <i>100% Untreated Cotton</i>, was amended to include the PPE requirements for works associated with hot sparks;</p> <p>The wording changed and additional point added to the paragraph 5.5.3, <i>Face Shields</i>;</p> <p>The wording was changed in the second bullet-point of paragraph 5.5.4, <i>Combinations</i>;</p> <p><i>Paragraph 5.7, Fall-arrest Equipment/Safety Harnesses</i> section was amended to mention rescue plan;</p> <p>Additional wording in regard to deviation from PPE Requirements for Visitors was added to the Note in paragraph 5.12, <i>Visitor Requirements</i>.</p>