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Air BP ANZ
Personal Protective Equipment (PPE)
Policy and Requirements

GEN 330 ANZ

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Use of Language

Throughout this document, the words 'may', 'should' and 'shall', when used in the context of actions by Air BP or others, have specific meanings as follows:

(a) 'May' is used where alternatives are equally acceptable.

(b) 'Should' is used where a provision is preferred.

(c) 'Shall' is used where a provision is mandatory.

Note that alternative or preferred requirements may be qualified by Air BP in another referenced document.

Revision	Date	Originator	Revision Details
Based on Air BP Global Policy	05/05/2006	M Nott	DRAFT
01	21/08/2006	P Hunt	DRAFT
02	23/10/2006	P Hunt	Released
03	09/04/2008	P Hunt	Revision
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05	07/02/2012	P Hunt	Revision
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07	19/12/2014	P Hunt	Revision
08	14/08/2018	P Hunt	Visitor requirements refined, moulded ear plugs included, bump caps optional. PPE table updated.
09	01/06/2020	M Green	Revisions to requirements around gloves, hard hats, bump caps, safety glasses, and response to propeller risk

CONTENTS

1. PPE POLICY AND REQUIREMENTS

1.1 DOCUMENT PURPOSE

Personal Protective Equipment (PPE) is required to protect anyone working on Air BP sites from the residual risk of injuries and illnesses arising from workplace risks. Specified PPE requirements also apply to BP or Third-Party visitors, depending upon access and activity.

PPE is the last line of defence against such injuries and illnesses and every effort shall be taken to reduce risks before resorting to PPE. In some cases, it offers our main defence.

This document is based on Air BP GEN 330 Personal Protective Equipment (PPE) Standard and provides clarification and Management of Change regarding the application of this standard within Air BP ANZ.

1.2 DOCUMENT SCOPE

People: This document applies to:

- All members of the Air BP and Air Refuel workforce, including employees and contractors.
- Site visitors.

Sites: This policy shall be mandatory at all Air BP-managed sites in ANZ. Where BP does not have operational control of a site, Air BP shall endeavour to ensure the operator adopts an internal standard comparable to the requirements of this document.

Activities: This policy covers PPE requirements on site and there may be additional PPE requirements for non-routine work or high-risk activities, as stipulated in the method statement, risk assessment and/or work authorisation. Site Specific Task Breakdowns may require additional PPE protection in some cases in response to specific hazards identified through the risk assessment process.

Coverage: Its contents cover the issue and use of PPE intended for:

- whole body protection
- UV protection
- hand protection
- head protection
- foot protection
- eye and face protection
- hearing protection
- fall protection

1.3 ACCOUNTABILITIES

1.3.1 Site Manager

The Site Manager is responsible for ensuring that:

- This policy is adopted as the PPE Policy for the site together with such additional protection / procedures adopted for special situations following a risk assessment.
- All site staff are aware of the PPE Policy and have had the reasons for that policy clearly explained and that appropriate PPE training (including maintenance) has been given.
- The PPE defined in the Site PPE Policy is available and in serviceable condition. A sufficient stock of PPE, cleaning wipes and spare parts should be available to wearers. Only proper spare parts should be used in maintaining PPE, or the equipment may not provide the required degree of protection.
- All visitors to the site / installation comply with the Site PPE Policy, irrespective of their status or position.
- Any contractors working on their site have had the PPE requirements for their task clearly communicated and understood.
- Monitoring compliance on site and taking corrective action where non-compliance is found.

1.3.2 All site staff

All site staff (management, supervisors, operators, etc.) shall comply with the Site PPE Policy and shall wear the required PPE. Failure to do so breaches the Air BP HSSE Rules and those not complying may be subject to disciplinary action.

All staff shall ensure that all PPE in their care is:

- Kept in a good working condition (any defects shall be reported to the line supervisor who shall immediately replace deficient PPE items).
- Cleaned as required.

1.3.3 PU Operations Managers

The PU Operations Managers (NZ, Major Airports and GA Aust) are responsible for:

- Ensuring that this policy is in place and complied with at each of their sites within scope.
- Ensuring that any PPE purchased and used is to the appropriate national / BP requirements and standards.
- Ensuring appropriate training programmes include the use of approved PPE.

1.3.4 Contractors

Contractors are responsible for the provision of all safety equipment to themselves and their teams, including any sub-contractor personnel, and any procedures required to maintain and ensure their use in accordance with this document.

Contractor employees, when working on Air BP sites and installations, shall comply

with this PPE Policy or site-specific requirement, or equivalent. This will be subject to any additional Control of Work and Permit to Work documents made at the time of the work to be done on site.

1.3.5 BP or Third-Party Visitor requirements

Visitors are defined as all individuals entering the site other than site staff or contractors engaged by BP to complete work activity on the site.

1.3.5.1 Visitors entering the operational area (or other area where PPE is designated as required):

Any visitor (BP or Third party) entering those areas of Air BP facilities defined as requiring the use of PPE shall comply with this PPE Policy, any additional site-specific PPE rules and any other specific (e.g. project) requirements.

The PPE that is necessary for all visitors is closely aligned with that required for site personnel. It includes, but is not limited to:

- Neck to toe clothing
  - For visitors (BP or otherwise) conducting audit, operational training or other activities requiring proximity to live operations, the neck to toe requirement shall be consistent with Clause 4.3, e.g. BP Management roles conducting site investigations, audits, training or Operational Management visits or accompanying statutory body audits, etc.
  - For visitors (BP or otherwise) who are **not** in proximity to live operations (e.g. observing ramp from a service vehicle or at safe distance, doing walk-through of depot without Hazardous Area entry, walking a pipeline, etc., the neck to toe requirement shall be, as a minimum, full cover, >50% natural fibre content clothing, e.g. Airport entity management role, Government or other specific purpose visits, BP non-operational management visits.
- Bump cap (or hard hat, where hard hats are mandatory, as per 4.7.1).
- Safety glasses where required (over-glasses are acceptable).
- Safety boots are preferred; however, safety shoes are acceptable for short term visits on even surfaces and not involving access in and out of fuelling vehicles.
- Hearing protection, where required. Class 5 disposable ear plugs may be used, in which case very high noise environments should be avoided, e.g. Dash 8 APUs.
- Hi-viz clothing, vest or tabard.
- Gloves, if/where appropriate. (Note: Visitors would not normally be permitted to handle equipment).

Visitors shall not be permitted to access areas requiring the use of safety harnesses unless covered by specific PtW approval.

It is good practice to keep a small stock of PPE at sites for use by visitors.

1.3.5.2 Visitors NOT entering the operational area

Visitors **NOT entering designated PPE areas**, for example entering only the site office and accessing the office via a direct path from entrance gate to office door, outside of the operational areas, can do so without requiring the above identified PPE (unless site-

specific risk assessment dictates otherwise).

Appropriate business attire and full cover footwear shall be the minimum requirement in these circumstances.

2. PROCESS TO DEFINE SITE SPECIFIC PERSONAL PROTECTIVE EQUIPMENT (PPE) POLICY

Using PPE is often essential, but it is generally the last line of defence after engineering controls, workplace practices and administrative controls. Hence, the usage of PPE is mandatory and an important part of the protection system for people to mitigate the effects of hazards encountered during work or visits, and periods of time exposed to noise, e.g. Jet engines and turbo props.

It is the intention of Air BP to ensure that people are provided with the necessary equipment to protect them from hazards encountered in carrying out their duties and maintain a safe working environment.

PPE supplied is intended for use at work and will be replaced on presentation of worn or damaged items.

2.1 Site-specific risk assessment and PPE policy

This document comprises the Air BP ANZ PU wide generic policy assessment mentioned in Air BP GEN 330.

Any site-specific risk assessments shall be reviewed:

- if there is reason to suspect they are no longer valid
- after an incident or change of generic Task Breakdown, processes, equipment, devices, etc.

A non-compliance procedure shall be available and communicated to the workforce.

2.2 Area-specific PPE requirements (including PPE-free areas)

As part of the overall Site PPE Policy, there may be the need to define different PPE requirements to reflect the different risks in various areas of the site. This is acceptable providing that the number of PPE areas is kept to a minimum. The table in Section 3 provides mandatory requirements for each type of PPE that will suit most sites.

The Section 3 table or its site-specific version, where available, shall be displayed in positions where they can be easily seen by staff leaving their offices / amenities for operational areas.

There shall be a clearly defined visitor PPE-free path to and from offices (if there is no direct public access to the office). This will allow both employees and visitors to use an agreed safe path from the public area to the offices. This visitor PPE-free path shall be clearly delineated, e.g. with a path marked on the ground, or as a minimum for GA sites, a sign requiring visitors to report directly to the office.

2.3 PPE signage

The PPE requirements for the site, and for each area (see Section 2.2 above), must be clearly identified and signed in accordance with Air BP standards and local legislation to ensure employees, contractors and visitors are made aware of the PPE requirements for that site / area.

Generally speaking, there are four basic types of safety sign:

- a blue circle symbol indicates MANDATORY ACTION – 'you must do'

- a red circular outline with red bar indicates PROHIBITION – 'do not do'
- a yellow triangle indicates CAUTION – 'warning of danger'
- a green square / rectangle indicates INFORMATION – 'safe conditions'

Blue signs are generally used to advise mandatory PPE requirements.

2.4 Compliance with national legislation

The selected PPE will meet the national and/or regional (e.g. Australian and New Zealand) regulations and standards.

Should the national standard be lower, then this minimum standard will apply.

Should there be doubt about the applicable standard, a ruling shall be obtained from the PU HSSE Manager.

3. MINIMUM PPE REQUIREMENTS IN OPERATIONAL AREAS

PPE	APRON	DEPOT YARD	TANK FARM	VEHICLE WORKSHOP
 Safety Boots	✓	✓	✓	✓
 Ear Defenders	✓ (Note 1)	Not required (Note 1)	Not required (Note 1)	Not required (Note 1)
 Neck to Toe Clothing	✓ (Note 2)	✓ (Note 2)	✓ (Note 2)	✓
 High Visibility Vest	✓	✓	✓	✓
 Safety Gloves & Barrier Creams	✓ (Note 3)	✓ (Note 3)	✓ (Note 3)	✓ (Note 3)
SPF30+ sunscreen	✓ (Note 4)	✓ (Note 4)	✓ (Note 4)	
 Bump Cap (optional liner in cold weather)	✓	✓	✓	✓
 Hard Hat (optional liner in cold weather)	RA	RA	✓ PER, AKL, GOV tank bunds	RA
 Eye Protection	✓	✓	✓	✓
 Harnesses	RA (Note 5)	RA (Note 5)	RA (Note 5)	RA (Note 5)

General: Refer to the details for each PPE item listed in section 4 of PPE Policy.

Note 1: Site noise survey and/or risk assessment required to establish hearing protection requirements by area. Comply with signage in specific areas.

Note 2: Not excessively loose. Follow site visual standards policy for uniforms.

Note 3: As specified in Task Breakdowns, and in good condition. Take them with you in all operational areas (includes site mngrs/supervisors, contractors and Air BP Ops Team).

Note 4: Wear sunscreen in direct sunlight.

Note 5: Training must be provided to all users before use.

✓ = Mandatory

RA = Mandatory where indicated by work's Risk Assessment.

Display this table on site noticeboards

4. STANDARD PERSONAL PROTECTIVE EQUIPMENT

In the following pages, each type of PPE is described, the risks it addresses described, minimum requirements and recommended best practice listed, care and maintenance requirements listed, HSE tips provided and applicable standards listed.

Note: Site staff/contractors may enter and exit the site via a direct path from entrance gate to office door, outside of the operational areas, prior to, or after the completion of work duties, as per the visitor requirements in section 1.3.5.2.

4.1 SAFETY BOOTS

4.1.1 Risks, risk mitigation and minimum requirements

4.1.1.1 Impact damage to toes and feet

A major risk is that heavy items could fall on the feet leading to damage of toes. The use of sturdy boots with a steel or carbon-fibre toecap is mandatory for this reason.

Safety boots are constructed sturdily and offer a good degree of protection to other areas of the feet in the event the foot strikes or is struck by an object.

4.1.1.2 Spark leading to fire

Uncovered steel toecaps or metal studs could generate a spark which could lead to a fire. Covered toecaps are mandatory for this reason.

Footwear which does not allow static to dissipate can lead to the risk of a static discharge which could lead to a fire in work areas where flammable fuel is handled or stored. For this reason, anti-static soles (called static dissipative soles in some regions) are mandated in work areas where flammable fuel is handled and stored.

For certain activities, specialised footwear may be required, which overrides the above requirement, e.g. electricians carrying out routine electrical work should stand on insulated mats or have insulated soles to avoid electrocution.

4.1.1.3 Ankle protection, slips, trips and falls

Slips, trips and falls can be minimised by wearing footwear which have oil resistant soles, and which have a good tread for purchase and traction. These are mandatory requirements.

Walking on various, different or uneven surfaces, and activities such as climbing in and out of vehicle cabs introduces the recognised risk of twisting ankles or other foot / lower leg injuries. For this reason, boots with ankle support are mandatory unless otherwise stated in works risk assessments or under conditions described for visitors in section 1.3.5.

Elastic-sided, sports shoe, or sandal-style safety footwear are not acceptable.

4.1.1.4 Dermatitis and other skin related illnesses

It is likely that any boots will, over time, receive drips of fuel. If allowed to come into contact with the skin over an extended period, this could lead to skin-related illnesses. To prevent this, oil resistant uppers are mandatory.

Mandatory Requirements

- AS/NZS 2210 Occupational Protective Footwear – Guide to Selection Care and Use.
- Anti-static soles.
- Covered steel or carbon fibre toecaps.
- Lace up boots (with or without side zip) with ankle support. Ankle support must be above ankle joint (higher support is also acceptable). Elastic-sided boots are not acceptable.

- Oil resistant soles and a good tread.
- Oil resistant uppers (i.e. evident that hydrocarbon contact with the skin will be avoided in the event of a spill).
- Note the availability of safety gumboots.

4.1.2 Use of PPE

Safety footwear must be maintained in good condition, checked regularly and discarded if fuel splashed, worn or deteriorated. Laces should be checked and replaced if necessary. Materials lodged in the tread must be removed. The stitching should be checked for loose, worn or cut seams.

Safety footwear is usually replaced annually, or more frequently if excessively worn or damaged.

4.2 EAR DEFENDERS

4.2.1 Risks, risk mitigation, minimum requirements and recommended best practice

4.2.1.1 Hearing loss

Hearing loss is a recognised risk in the aviation refuelling industry. Over extended periods of time, exposure to high levels of noise can lead to impaired hearing or permanent severe hearing damage. Short term high levels of noise can also lead to impaired hearing.

It is vitally important to the health of our workforce that they wear appropriate hearing protection suited to the circumstances in which they work. The protection must be worn correctly **at all times** when subject to high levels of noise.

In order to prevent damage to hearing by exposure to excessive or prolonged noise, noise levels must be reduced to as low as reasonably practicable. Where this is not practicable, suitable hearing protection must be provided.

For more detailed information on noise action levels and the management of noise, refer to Appendix 1: Air BP Hearing Conservation Programme. This programme applies to locations where Air BP has operational control of the workforce. For locations where Air BP does not have direct operational control, Air BP will influence the operator to adopt a similar programme, e.g. ARs / Agents / JVs managed by others.

Mandatory Requirements

- Hearing protection must be certified in accordance with Class 5 under AS/NZS 1270 Acoustics – Hearing protectors.
- Hearing protection must be worn on the airport apron when in the vicinity of noisy ground service equipment or aircraft with engines or APUs running, as well as in other noisy environments such as pump houses, compressor rooms or when air tools are being used. Hearing protection must be in place before the noise commences and until returning to a quiet area.

Recommended Best Practice

- Provide moulded ear plugs or earmuffs meeting Class 5 performance criteria. People may choose the protection that is most effective for them.
- Disposable absorbent pads enhance earmuff comfort in very warm climates.

4.2.2 Types of hearing protection

Essentially there are two basic types of hearing protector: Ear plugs and earmuffs.

Only earmuffs or individually moulded and fitted ear plugs (which may include a two-way radio earpiece) that comply with the latest version of AS/NZS 1270, Class 5 shall be used on Air BP operational areas.

Disposable Class 5 ear plugs may be made available for visitor use provided they are not used in very high noise environments, such as near Dash 8 APUs.

4.2.3 Safety tips

Hearing damage is a progressive problem which manifests itself over many years of neglect. As a guide, if you have to raise your voice to be heard in the work environment, you should be wearing hearing protection. It is very important to fit hearing protection before approaching the noisy area.

Moulded ear plugs: Follow the supplier's advice for use, cleaning and replacement.

Earmuffs: Things to check visually each time before use:

- Head bands (may stretch and lose clamping capacity).
- The arms of glasses may reduce the effectiveness of the seal.
- The foam surround on earmuffs (can lose its flexibility and sealing properties over time). The foam and cover around earmuffs should be checked visually each time before use and replaced on a yearly basis.

The correct fitting of Class 5 hearing protection is strongly recommended prior to opening refuelling vehicle doors or windows when in noisy areas airside.

Double hearing protection (earmuffs over ear plugs) may be an effective solution in some situations if peak short-term exposure limits (regardless of duration) are exceeded, e.g. beneficial for high noise aircraft situations such as Dash 8 APUs.

4.3 NECK TO TOE CLOTHING

4.3.1 Risks, risk mitigation, minimum requirements and recommended best practice

4.3.1.1 Static sparking from clothing

There are two main potential sources of static sparking from clothing: (1) across the folds of, say, material in a jacket, and (2) from a discharge of static caused by a person moving inside the clothing. The risk from static sparking across the external folds of a jacket is low, whilst the risk of a spark from a static build-up whilst wearing clothing is a much higher risk.

To mitigate this risk, two minimum requirements are set. One is to ensure that the materials used in uniforms / coveralls generate less static, i.e. a high proportion of cotton or other natural fibres in the fabric, and the other is through the use of anti-static soles on footwear.

In addition, there is a risk from a static spark when clothing is removed, e.g. an outer jacket. It is important that personnel clearly understand that this should not be done near an aircraft or in a hazardous area.

Similarly, if a fuel spill occurs and a person's clothing is soaked in fuel, it is important that the person is put under a shower BEFORE his/her clothing is removed.

4.3.1.2 Items falling from pockets into tanks, etc.

Another risk is from pens / tools falling from pockets into tanks. This can be minimised by reducing the number of items carried in external pockets to a minimum, and objects shall not be carried on the upper body when this risk exists.

4.3.1.3 Neck to Toe Policy

Due to the risk of skin cancer associated with exposure to UV light, and to help prevent damage to the skin through cuts and abrasions, we have established a Neck to Toe Policy for Air BP ANZ.

The wearing of wide brim bump caps, when safe to do so, and regular application of sunscreen is strongly recommended, When earmuffs are required while wearing a wide brim bump cap, it may not be possible to use headband-style earmuffs – neckband-style ear muffs (and/or moulded ear plugs) may be required. The use of a chin strap when wearing a wide brim bump cap is mandatory when worn in aircraft movement areas.

- Bump caps offering good UV protection and comfort are recommended where possible, e.g. wide brim bump caps offer ultraviolet protection, and a chin strap.

- Sunscreen with an SPF rating of 30+ on exposed areas of skin.

4.3.1.4 Fuel-impregnated materials in contact with skin

Fuel impregnated clothing and footwear in contact with skin (including rags in pockets, etc.) can lead to long term dermatological and/or skin cancer issues. Clothing shall be removed promptly, and the skin cleaned and treated with skin moisturiser as a precaution. Heavily contaminated clothing needs to be disposed of safely as it presents a fire hazard.

Clothing shall be washed regularly and replaced when necessary.

4.3.1.5 Fire burns

Fire-rated clothing is not required for routine operations – refer Appendix 3: Risk and Feasibility Review: PPE requirements for fire protection.

Tyvek disposable overalls are widely used in tank cleaning because they offer protection against dusts, including inorganic Lead. However, in the event of a fire, the Tyvek is likely to melt and burn against the skin. Tyvek must therefore not be worn against the skin when there is a potential for fire.

Airport depot tanks do not typically exhibit a significant amount of sludge at the time of tank cleaning when compared to terminal tanks. Consequently, gas free certification is not usually as complex as for terminal tanks.

Therefore, protective clothing requirements for tank cleaning at airport depots are as follows:

- Entry for gas free check: Fire protective clothing comprising overalls and hood must be worn under Tyvek overalls. The currently approved clothing is:
  - Nomex with a preferable density of 180 g/m² (minimum density 150 g/m²), or
  - Kermel of minimum density of 220 g/m²
- Entry following issue of gas free certificate: Subject to risk assessment by the PtW issuing authority, the use of fire protective clothing under the Tyvek is not mandatory.

Notes:

- Nomex is generally considered as being less comfortable with poorer breathing than cotton, so extra attention must be taken to manage heat stress and fatigue. Kermel is heavier and less breathable than Nomex; therefore, it is less suitable in hotter climates.
- Like cotton, Nomex and Kermel cannot be cleaned if soiled by leaded sludge and must be disposed of as per the Octel Regulations.

4.3.1.6 Being struck by third party

On a busy ramp, the risk of not being seen and struck by another vehicle is high. This is usually addressed through the use of hi-viz vests or tabards or through uniforms designed to meet standards for high visibility clothing for both day and night use. It is essential to extend this requirement to all outer items such as wet weather clothing.

Mandatory Requirements

- 100% cotton / natural fibre.
- Ultraviolet protection factor (UPF) of 25 or better – refer AS/NZS 4399.
- Minimise the number of pockets, and items carried in pockets.
- Regular laundering programme in place.
- Clear communication that clothing is not to be removed near an aircraft or while in other hazardous areas.

- Emergency procedures and training to include the requirement to remove fuel-soaked clothing only after the person has been placed under a shower.
- Neck to toe.
- Nomex overalls under Tyvek for tank entry prior to gas free certification.
- Further information is contained in Appendix 2: Air BP Education Programme on UV Protection, Dealing with Heat Discomfort, and the Neck to Toe Policy.

Recommended Best Practice

- Wear a suitable wide brim bump cap for additional UV protection, taking care to:
  - consider the most effective combination of UV and hearing protection
  - compensate with head movement for any impact of the brim or peak on field of view
  - ensure good fit and comfort

4.3.2 Use of PPE

Clothing should be kept in good condition, cleaned and replaced regularly, fit well, and remain fastened when in use.

4.3.3 Safety tips

PPE should be examined to ensure that it is in good working order before being issued to the wearer.

Such examination should be carried out by properly trained staff in accordance with the manufacturer's instructions.

While most PPE will be provided on a personal basis, some may be used by a number of people (e.g. hi-viz vests reserved for visitors). There should therefore be arrangements for cleaning and disinfecting, if necessary, before PPE is reissued.

4.4 HIGH VISIBILITY VEST / TABARD

4.4.1 Risks, risk mitigation and minimum requirements

4.4.1.1 Being struck by third party

Whilst on the ramp, or in other situations, there is always the risk of being struck by a third-party vehicle or of being impacted by another party's operations or activities. To minimise this risk, the use of hi-viz uniforms, vests or tabards are mandatory in Air BP operations.

4.4.1.2 Static discharge

Hi-viz vests / tabards can generate a static charge. As for uniforms, vest / tabards must not be removed in a hazardous environment, and not removed before showering if an operator is covered in product due to a spill / fuel leak.

Mandatory Requirements

- AS/NZS 4602 High Visibility Safety Garments, Class D/N (i.e. designed for both day and night use).
- Hi-viz vest or tabards (unless incorporated into other outer clothing).
- Minimise metallic components.
- Never remove in a potentially hazardous area.
- Use vests / tabards made from natural materials, or with anti-static properties.

4.4.2 High visibility vest

A high visibility vest shall have both vertical and horizontal reflective stripes and be made of a light vest-type material. Weather factors should be considered as this may not be suitable in colder countries, and therefore, a waterproof jacket (and optional trousers) with high visibility colours and reflective stripes will be more effective.

High visibility vests and reflective strips must also meet local Civil Aviation Authority requirements.

Comfort in typical weather conditions experienced at the site is important in selecting the correct type of vest / tabard.

4.5 SAFETY GLOVES AND BARRIER CREAMS

4.5.1 Risks, risk mitigation, minimum requirements and recommended best practice

4.5.1.1 Health risk from products being handled

During routine operations, there is the possibility that our workforce will be exposed to fuel (Jet and Avgas), additives, lubricants and other products required to run and maintain Air BP's operations. All these products may present a health risk to our workforce, and it is important that the appropriate gloves are worn for the task being carried out. These can range from latex-type gloves through to heavy industrial gloves. The use of gloves is particularly important for the prevention of dermatitis.

4.5.1.2 Physical damage to hands from abrasions / cuts

In addition to health hazards, our workforce could be exposed to routine tasks which could result in abrasions or cuts, e.g. handling hoses or vehicle parts. To minimise the risk of cuts and abrasions, gloves are needed which protect the hands as much as possible, but which themselves do not introduce a secondary risk by making the job unsafe, e.g. by being slippery, or being too stiff to allow correct handling of the equipment being moved.

4.5.1.3 Static discharge from gloves

Although a low risk item, there is the possibility that highly insulated gloves could allow the build-up of static to the extent that when the gloves are removed, a static spark could occur. The requirement for anti-static soles on safety boots described earlier minimises this risk, but additional precautions can be incorporated into the specifications for gloves.

4.5.1.4 Gloves restrict activities

In special circumstances, the use of gloves can inhibit a job being done safely, e.g. water detector capsule testing, and workshop assembly and disassembly tasks that require a high degree of manual dexterity. Disposable nitrile gloves should be used wherever possible in these situations. Use of a suitable barrier cream, provided the activity has been risk-assessed and the PPE rules incorporated into the Site Specific Task Breakdown for the task, is the minimum and less effective solution.

Mandatory Requirements

- AS/NZS 2161 Occupational Protective Gloves
- All Air BP site-based personnel, contractors and Air BP operations team personnel shall carry gloves with them at all times while in operational areas and wear them whenever handling equipment.
- Except as described in 4.5.1.4 above, gloves must be worn when there is the possibility of contact with products such as fuel, oils, greases, dirt or other harmful products, and also to protect the hands from cuts and abrasions.
- Care should be taken when handling products such as Jet or Avgas 100 LL, which may lead to dermatitis, and should not come into contact with the skin.

- Manufacturers' Material Safety Data Sheets (MSDSs) must be consulted for advice on the recommended PPE to use when handling new hazardous products.

- The gloves required for individual tasks must be identified and incorporated into the Site Specific Task Breakdown for that task.

- When handling fuels, oils, chemicals or solvents, information on suitable hand protection can be obtained from the MSDS and the hazardous substance risk assessment. Usually, nitrile or PVC gloves will be sufficient, e.g. ATG MaxiDry General Purpose 56-425 nitrile gloves.

- Leather gloves will not provide long term protection from fuel, oils or chemicals, but offer good mechanical protection when handling hoses and nozzles, etc., in situations where there is low risk of fuel contamination.

4.5.2 Use and care of PPE

Care should be taken in the putting on, use, removal and storage of protective gloves. They should be maintained in good condition, checked regularly and discarded if fuel soaked, worn or deteriorated. Gloves should be free of holes or cuts and foreign materials and their shape should not be distorted. They should fit the wearer properly leaving no gap between the glove and the wearer's sleeve with the arms in rest position.

Barrier cream is provided at some vehicle maintenance locations where gloves are impractical for certain tasks. It helps minimise skin exposure against dirt and dermatitis. Barrier cream must be applied to the hands just before work is started. Rub the cream well into the skin, especially round the nails and cuticles.

4.5.3 Safety tips

Aviation fuels are solvents and can cause dermatitis by removing natural oils from the skin. Always wear approved protective gloves when sampling and handling fuels.

CONCAWE Report no. 3/82 indicates that there is a possibility, under certain conditions, such as prolonged exposure without the contamination being thoroughly removed by washing, that used engine oil may present a skin cancer risk.

When contaminated from product / spillage, replace with clean gloves.

Ensure barrier cream is applied to clean hands. Always re-apply cream after washing hands, before resuming work.

Non-latex surgical gloves should be provided for use when carrying out certain maintenance tasks.

4.6 BUMP CAPS

4.6.1 Risks, risk mitigation and minimum requirements

4.6.1.1 Impact damage to head

During routine operations around aircraft and in other aspects of our operations, there is the risk of the head being hurt by hitting an aircraft wing, propeller blade, pitot tube or some other surface / edge.

The use of bumps caps as a minimum is now mandatory in all operational areas within Air BP ANZ operations. Hard hats / safety helmets may be worn in lieu of bump caps.

Refer to section 4.7 re. hard hats.

Bump caps shall comply with EN 812 Industrial Bump Caps.

4.6.2 Care and maintenance

Bump caps must be maintained in good condition.

Items should be stored in a safe place, and not in direct sunlight.

Items should be visually inspected for signs of damage or deterioration and replaced if necessary.

4.6.3 Safety tips

Head protection may be provided in the form of bump caps or safety helmets. Bump caps protect the head from bruising and abrasions only. Safety helmets provide additional protection from falling objects.

Always ensure that the manufacturer's recommended shelf life for the item is still in date.

4.7 HARD HATS / SAFETY HELMETS

4.7.1 Risks, risk mitigation and minimum requirements

4.7.1.1 Impact damage to head

Whilst working in some areas, there is the risk of an object being dropped from a height onto another person at a lower level, or of a person striking their head on a hard, low-level surface. The injuries from even a small item dropped from height can be severe.

Mandatory Requirements:

- Hard hats shall be worn at all times within the bunded areas of the large vertical bulk storage tanks at Auckland and Perth JUHIs, and Gove Airport depot.
- Site Managers shall also review their facilities including all bulk storage tank farms and other operational / workshop areas to identify situations where there is a realistic risk of objects falling from heights onto a person's head, or of people bumping their head on obstructions, e.g. overhead gantries such as Broome pod filling, test rigs, etc. Any such areas shall be defined as mandatory hard hat areas, signs affixed to indicate this, and hard hats worn.
- A site procedure (including PtW, safety barriers, etc., as appropriate) shall be put in place to prevent access beneath an area whilst work is happening at height, e.g. an area below maintenance work on the roof of a tank.
- Hard hats shall comply with AS/NZS 1801 Occupational Protective Helmets.

4.7.2 Care and maintenance

Head protection must be maintained in good condition.

Items should be stored in a safe place, and not in direct sunlight.

Items should be visually inspected for signs of damage or deterioration, and replaced if necessary.

The sweat band should be regularly cleaned or replaced.

Only use manufacturer-approved accessories with the item.

The use of UV protective brims is recommended.

No additions or alterations shall be made to any safety helmet. This includes painting, or the application of stickers (other than any text or logos applied by the manufacturer in accordance with the standard), which can severely reduce the strength of the helmet.

Solvent or hydrocarbon-type cleaners (e.g. 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.

4.7.3 Replacement

Safety helmets should be examined routinely, as well as after any impact, for damage

and replaced where necessary.

As a guide, they should be replaced every 5 years, or sooner if damaged, left for an extended period in strong direct sunlight, or dropped.

4.7.4 Safety tips

Head protection may be provided in the form of bump caps or safety helmets. Bump caps protect the head from bruising and abrasions only. Safety helmets provide additional protection from falling objects.

Always ensure that the manufacturer's recommended shelf life for the item is still in date.

The use of sun-shade brims is strongly recommended. Ensure these are firmly attached if worn in an aircraft movement area to prevent FOD. Hard hats are available with fitted earmuffs.

4.8 EYE PROTECTION

4.8.1 Risks, risk mitigation and minimum requirements

4.8.1.1 Damage to eyes from product

Fuelling systems operate at pressure, and there is the risk of a spray of fuel entering operators' eyes. This risk can be significantly reduced by wearing suitable eye protection.

4.8.1.2 Damage to eyes from foreign particulates and foreign bodies

Airport depots are often windy places and there is a risk of particulates entering operators' eyes.

Airport aprons have the added hazard of jet blast and propeller wash.

Many workshop and maintenance activities, either with or without power tools, involve the risk of foreign bodies entering operators' eyes.

Eye protection will minimise the risk of eye injury from these hazards.

4.8.1.3 Damage to eyes from UV

UV radiation can affect eyes, and the use of eye protection with built-in UV protection helps minimise this risk.

Mandatory Requirements

- AS/NZS 1337 Eye Protectors for Industrial Applications, AS/NZS 1336 Recommended Practices for Occupational Eye Protection, and AS/NZS 1338 Filters for Eye Protectors.
- Eye protection outside designated offices and mess rooms, excluding a risk-assessed and delineated public access way into the site / office. This applies at all times of the night and day. Always wear eye protection in the office, etc., for any tasks which could result in eye injury.
- UV protective eye protection, where UV risks are high, are mandated.
- Prescription safety glasses are mandatory for full-time personnel and people doing substantial hours and/or operational tasks on site requiring corrective lenses, including the full-time employees of contracted maintenance and construction contractors. These can be obtained from optometrists on prescription as bi-focal or multi-focal glasses meeting the safety glass standards. Note that some operators may experience difficulty when performing overhead tasks such as reading information on aircraft fuelling panels, so operators may prefer to switch between separate sets of prescription long distance and reading safety glasses. In this case, the short time of exposure while the operator changes glasses is acknowledged and the operator should be encouraged to do so while shielding his/her face from wind-blown debris or fuel. Note that prescription safety glasses may not be available in all areas.
- If a neck strap / loop is used, it should have a breakaway fitting to prevent strangulation.

- Have both clear and tinted versions available. Anti-glare versions are also available. Dark tinted glasses shall not be worn in low light conditions or used to inspect pits or chambers.

There needs to be flexibility in the eye protection used at a site to address the risks that may be evident, and selection should include consultation with staff. Where there is a higher risk of product spray or flying solid particles, then a full-face shield should be specified.

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

4.8.2 Goggles and face shields

Chemical splash goggles or face shields shall be used to provide full protection to the eyes and surrounding skin area against chemical splashes or when there is a high risk of cuts to the face, foreign body or spray injury. For example, they shall be worn when:

- Working in close proximity to aircraft propellers, pitot tubes, static dissipators or other sharp projections.
- Blowing down parts and equipment with compressed air.
- Using pressurised water-cleaning equipment.
- It is possible that contained pressure has not been fully relieved.
- Use of maintenance tools which generate particulates or sparks, e.g. grinders.

4.8.3 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.

4.8.4 Use and care of PPE

- Lenses or shields must be kept clean, as dirty lenses restrict vision, which can cause eye fatigue and lead to accidents.
- Lenses that are scratched or pitted must be replaced, as they may impair vision, and their resistance to impact may be impaired. Transparent face shields must be replaced when warped, scratched or brittle with age.
- Prescription-type eye protection should be issued on a personal basis and be used only by the person they are issued to.

4.8.5 Safety tips

Fuel splashes / drips / sprays into the eyes may cause burning and could lead to long-term eye damage. Grit can lacerate the eyeball.

Ensure lenses are protected from being scratched when not in use.

Glass, polycarbonate and other plastic lenses can be cleaned by thoroughly wetting

both sides of the lenses and drying them with wet-strength absorbent paper.

Operators wearing contact lenses must ensure that when performing any task, they should always wear safety glasses to prevent any splashes entering the eyes and getting behind the lens which could cause damage to the eye.

4.9 SAFETY HARNESSES

4.9.1 Risks, risk mitigation and minimum requirements

Safety harnesses and associated equipment are often a component of a risk mitigation plan associated with working at height, including the use of ladders, and confined spaces.

4.9.1.1 Working at Height

Working at height should only be considered when all other methods have been investigated. Whenever working at height cannot be eliminated, a risk assessment of the task shall be completed and shall use the hierarchy of controls:

1. Working at ground level,
2. The use of temporary work platforms (e.g. scaffold, EWPs),
3. Fall restraint / prevention (preventing someone from falling),
4. Work positioning systems,
5. Fall arrest (stopping a person's fall before they impact a surface below).

When working at height cannot be avoided and is deemed necessary, control measures will be required to be identified and implemented, irrespective of the fall height.

Fall protection is required for the use of portable ladders (including for access and egress) where the height of climb exceeds 3 m.

4.9.1.2 Confined Space Entry

Safety harnesses are worn in confined spaces to facilitate rescue in the event of an emergency. Confined space entry is not usually a routine activity, and is therefore, controlled by the Permit to Work system.

Mandatory Requirements:

- AS/NZS 1891 Industrial Fall Arrest Systems and Devices.
- Safe Work Australia Code of Practice: Manage the risk of falls at workplaces.
- The BP Golden Rules of Safety - Working at Heights specify mandatory requirements for work above 2 m. Also refer to PRO-4.5-0001-1-05 Working at Heights. The BP Group GDP 4.5-0002 Use of Portable Ladders also specifies the mandatory requirements for the use of temporary ladders, including the use of fall protection when working or using for access and egress where the height of climb exceeds 3 m.
- The BP Golden Rules of Safety - Confined Space Entry specify mandatory requirements for confined space entry. Also refer to PRO-4.5-0001-1-04 Confined Space Entry.
- Any use of safety harnesses / fall protection equipment must be covered by a

documented method statement and risk assessment and must include an appropriate emergency rescue plan in case of a fall, including rapid retrieval of a fallen individual to avoid suspension trauma. This applies to all work that is carried out above 2 m. Refer: https://www.waha.org.au/technical-bulletins/first-aid-following-harness-suspension/

- Users of the fall restraint system shall have completed appropriate training from a nationally registered training organisation and be competent in its use.

- When an individual is exposed to an uncontrolled fall of 2 m or more, that individual is required to use fall arrest equipment designed to reduce personal injury in the event of a fall and limit free fall to 2 m or less.

- All personnel must use safety harnesses, lanyards and lifelines when working at heights in excess of 2 m.

- A dual lanyard system shall be utilised when the work method requires employees to detach and re-attach at height, to confirm that at least one connection point is maintained at all times.

- Safety harnesses properly anchored shall be used within travel towers, boom lifts or cherry pickers.

- Personnel using work positioning or fall arrest systems shall wear head protection in case of a fall.

For further details regarding the use of harnesses and fall arrestor equipment, refer to the following BP Golden Rules and ANZ PRO-4.5-0001-1 procedures:

- Confined Space Entry

- Working at Heights

Refer to Site Specific Task Breakdowns and the Control of Work Standard.

5. APPENDICES

5.1 Air BP Hearing Conservation Programme:

https://bp365.sharepoint.com/:b:/r/sites/RM6/AirBPTechnical/ASPAC/INTRANET%20FILES/HSSE%20policies/Local%20Air%20BP%20policies/HCP%20for%20PPE%20Policy%20Apr%202020.pdf

5.2 Air BP Education Programme on UV Protection, Dealing with Heat Discomfort, and 'Neck to Toe' Clothing:

https://bp365.sharepoint.com/sites/RM6/AirBPTechnical/ASPAC/INTRANET%20FILES/HSSE%20policies/Local%20Air%20BP%20policies/Neck%20to%20toe%20education%20for%20PPE%20Policy%20Apr%202020.pdf

5.3 Fire Risk Assessment for PPE Requirements:

https://bp365.sharepoint.com/sites/RM6/AirBPTechnical/ASPAC/INTRANET%20FILES/HSSE%20policies/Local%20Air%20BP%20policies/Fire%20Risk%20Assessment%20for%20PPE%20Requirements.pdf

5.4 Risk and Feasibility Review: PPE Requirements for Fire Protection:

https://bp365.sharepoint.com/sites/RM6/AirBPTechnical/ASPAC/INTRANET%20FILES/HSSE%20policies/Local%20Air%20BP%20policies/Risk%20and%20Feasibility%20Review%20-%20Use%20of%20FRC%20in%20Air%20BP.pdf

5.5 Skin Cancer Awareness

There is a lot of useful information on the Cancer Council website:

http://www.cancer.org.au/cancersmartlifestyle/SunSmart/Skincancerfactsandfigures.htm

Recommendations provided for outdoor workers by the Victorian Government:

https://www.betterhealth.vic.gov.au/health/ConditionsAndTreatments/skin-cancer-protecting-outdoor-workers

5.6 Extreme Weather Conditions:

- Hot weather conditions have been considered throughout GEN 330 ANZ
- Cold weather conditions:
  - Merino wool bump cap / hard hat liners, or winter bump caps may be worn.
  - Consider use of gloves that will not stiffen in extreme cold.
  - Anti-slide devices are available for walking on snow or ice, e.g. Jaktrax.