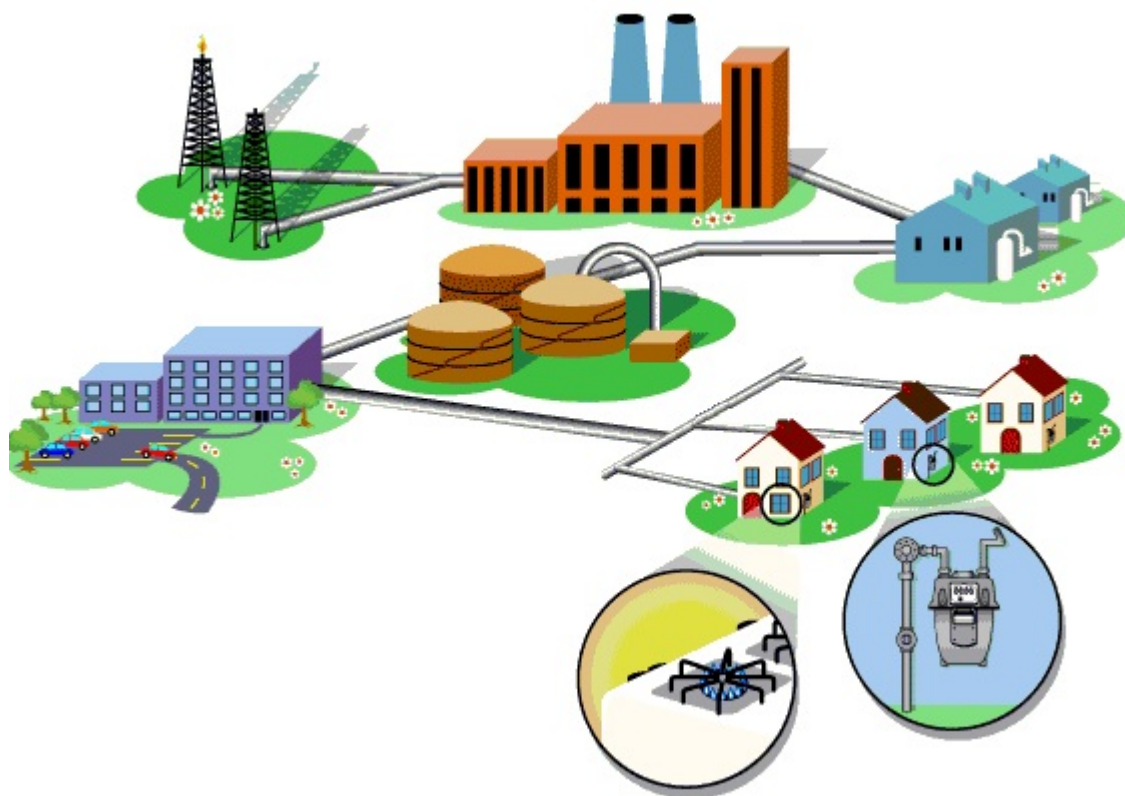




Georgian Oil & Gas Corporation

Executive Phase

Personal Protective Equipment (PPE)



		Issued for Approval					
Rev	Date	Reason for Issue		Prepared by	Checked by	Approved by	
Category Code				Category Code Description			
Area Code							
Document Type Code		PRO					
Life Cycle Code							
Transfer Date							
Project Code		Area Code	Function Code	Document Type	Sequence Number	Language	Revision
			HS	PRO		ENG	

TABLE OF CONTENTS

TABLE OF CONTENTS	1
1. INTRODUCTION	3
2. RESPONSIBILITIES	4
3. GENERAL REQUIREMENTS	5
4. LEVELS OF PROTECTION	6
4.1 LEVEL A	6
PERSONAL PROTECTIVE EQUIPMENT	6
4.2 LEVEL B	6
PERSONAL PROTECTIVE EQUIPMENT	7
4.3 LEVEL C	7
PERSONAL PROTECTIVE EQUIPMENT	7
4.4 LEVEL D	7
REASONS TO UPGRADE TO A HIGHER LEVEL	7
REASONS TO DOWNGRADE	8
3.1 HEAD PROTECTION	10
3.2 EYE AND FACE PROTECTION	12
3.3 FOOT PROTECTION	14
3.4 HEARING PROTECTION	16
3.5 RESPIRATORY PROTECTION	17
3.6 HAND AND BODY PROTECTION	18
3.7 PERSONAL FALL PROTECTION EQUIPMENT	20
PPE MATRIX 1	22

1. INTRODUCTION

GOGC Health and Safety unit develops personal protective equipment minimal requirements, obedience of which is necessary for GOGC and contractor/sub-contractor companies personnel as well.

Contractor will be responsible for the development of its own PPE requirements complying with GOGC's H&S requirements

This procedure provides the minimum requirement for Personal Protective Equipment (PPE). Minimal PPE is required to protect all employees from hazards associated with a job site.

Specialized personal protective equipment, the use of which is necessary in order to carry out certain activities

This procedure applies to all performing Company activities, its employees and visitors.

This specification describes Projects requirements for Personal Protective Equipment (PPE) for exposure to hazardous materials and work environments.

PPE is the last form of defence. Prior to its use, other defences such as removing the hazard, reducing the potential severity of the hazard (e.g., using a less toxic chemical, isolation of the hazard, reducing the number of people and extent of exposure etc.), should be implemented before PPE is applied.

PPE is defined as equipment designed to be worn by personnel to protect themselves against work related hazards which may endanger their health or safety.

PPE shall not be a substitute for effective engineering controls, safe working conditions or sound work practices. PPE will only protect personnel from injury not prevent incidents, it is the last resort.

For the choice of equipment, the guide presented as Appendix 1 "Personal Protective Equipment Guide" shall be used.

2. RESPONSIBILITIES

It shall be the responsibility of the performing Company, Construction Manager to ensure that the requirements of this Procedure are adhered to.

It shall be the responsibility of all supervisors (team leader) to ensure that all employees adhere to the requirements of this Procedure.

It shall be the responsibility of the CONTRACTOR's Site Safety Officer to monitor compliance to the requirements of this Procedure and report violations of these requirements and make recommendations for corrective action.

It shall be the responsibility of all employees to practice safe work habits and comply with the requirements of this Procedure.

Every Project member shall be aware of the potential hazards around him/her when carrying out even the simplest task. Always ensure that the correct tools, protective clothing and equipment are used.

3. GENERAL REQUIREMENTS

Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

Employers are required to provide a hazard free environment for employees. Anyone encountering hazardous conditions must be protected against the potential hazards. The purpose of personal protective clothing and equipment (PPE) is to shield or isolate individuals from the chemical, physical, and biological hazards that may be present in the workplace.

The adverse effects chemical substances may have on the human body necessitate the use of protective clothing. The predominant physical, chemical, or toxic property of the material dictates the type and degree of protection required. For example, protection against a corrosive compound is different than that for a compound which releases a highly toxic vapor. The work function and the probability of exposure to the substance must also be considered when specifying protective clothing. As with the selection of proper respiratory protective apparatus, the hazards encountered must be thoroughly assessed before deciding on the protective clothing to be worn.

Once the specific hazard has been identified, appropriate clothing can be selected. Several factors must be considered, most important being the safety of the individual. The level of protection assigned must match the hazard confronted. Other factors include cost, availability, compatibility with other equipment, suitability, and performance.

Protective clothing ensembles range from safety glasses, hardhats, and safety shoes to fully encapsulating suits with a supplied source of breathing air. The variety of clothing includes disposable coveralls, fire-retardant clothing, and chemical splash suits. Different materials are used to provide a protective barrier against the hazard.

4. LEVELS OF PROTECTION

When response activities are conducted where atmospheric contamination is known or suspected to exist, personal protective equipment must be worn.

Personal protective equipment is designed to prevent/reduce skin and eye contact as well as inhalation or ingestion of the chemical substance.

Protective equipment to protect the body against contact with known or anticipated chemical hazards has been divided into four categories.

- Level A (highest)
- Level B
- Level C
- Level D (lowest)

4.1 LEVEL A

Level A protection should be worn when the highest level of respiratory, skin, eye and mucous membrane protection is needed

PERSONAL PROTECTIVE EQUIPMENT

- Fully encapsulating chemical protective suit
- Gloves (chemical resistant)
- Boots, chemical resistant, steel toe and shank; (depending on suit boot construction, worn over or under suit boot.)
- Hard hat
- Coveralls

4.2 LEVEL B

Level B protection should be selected when the highest level of respiratory protection is needed, but a lesser level of skin and eye protection. Level B protection is the minimum level recommended on initial site entries until the hazards have been further identified and defined by monitoring, sampling, and other reliable methods of analysis, and equipment corresponding with those findings utilized

PERSONAL PROTECTIVE EQUIPMENT

- Chemical resistant clothing
- Coveralls
- Gloves (chemical resistant)
- Boots, outer, chemical resistant, steel toe and shank
- Hard hat

4.3 LEVEL C

Level C protection should be selected when the type of airborne substance is known, concentration measured, criteria for using air-purifying respirators met, and skin and eye exposure is unlikely. Periodic monitoring of the air must be performed

PERSONAL PROTECTIVE EQUIPMENT

- Full-face or half-mask, air-purifying respirator
- Chemical resistant clothing
- Gloves (chemical resistant)
- Boots, steel toe and shank, chemical resistant
- Hard hat
- Escape mask
- Faceshield

4.4 LEVEL D

Level D is primarily a work uniform and is used for nuisance contamination only. It requires only coveralls, hard hat and safety shoes/boots. Other PPE is based upon the situation (types of gloves, etc.). It should not be worn on any site where respiratory or skin hazards exist

REASONS TO UPGRADE TO A HIGHER LEVEL

(D is lowest, A is highest)

- Known or suspected presence of dermal hazards
- Occurrence or likely occurrence of gas or vapor emission
- Change in work task that will increase contact or potential contact with hazardous materials
- Request of the individual performing the task

REASONS TO DOWNGRADE

- New information indicating that the situation is less hazardous than was originally thought
- Change in site conditions that decreases the hazard
- Change in work task that will reduce contact with hazardous materials

FOR SELECTION OF PPE MAY INCLUDE:

- Identifying the potential hazards
- Determining the types of protective equipment available for the present hazards
- Evaluating the effectiveness of the PPE
- Selecting appropriate protective equipment
- Providing a variety of sizes to properly fit all users
- Selecting equipment that is compatible with other PPE

Contractor's H&S Manager makes decision on the level of PPE requirements with GOGC's HSE Manager agreement

TYPES OF MINIMAL PERSONAL PROTECTIVE EQUIPMENT INCLUDE:

- Head Protection - Class C (* page7)
- Eye and Face Protection - Safety Spec with side shield
- Foot Protection - Steel toe and mid-Sole footwear
- Coveralls - high visible jacket

Note: During any activities all contractors' all personal must wear minimal PPE.

Specialized personal protective equipment is necessary in order to carry out certain activities (listed in the attached table).

3.1 HEAD PROTECTION

Head injuries may be caused by falling or flying objects, or by bumping the head against a fixed object.

Protective helmets must do three things:

- Resist penetration
- Absorb the shock of a blow
- Protect against electrical shock

Head injuries may be prevented by the selection and use of appropriate head protection.

Personnel shall wear approved safety helmets at all times when in any operational or working area. When driving vehicles or working indoors helmets are not required. In the case where normal equipment is not suitable for a particular task, such as welding, then fit for purpose equipment will be supplied.

USE OF HEAD PROTECTION

to protect from the following potential hazards:

- Head trauma due to contact with falling objects
- Bumping the head against fixed objects
- Electrical shock or burns due to contact with exposed electrical conductors
- Various head and neck injuries due to the striking low overhead objects

REQUIREMENTS AND EXAMPLE SOLUTIONS:

- Workers must wear a protective helmet (hard hat) when working in areas where there is a potential for injury to the head from falling objects.
- Workers must wear a protective helmet designed to reduce electrical shock hazards where there is potential for electric shock or burns.
- Wearing a hard hat can reduce the impact from striking low overhead objects.
- Hard hats are designed to provide protection from impact and penetration hazards caused by falling objects. Hard hats must be worn when working below other workers who are using tools and materials which could fall.
- Head protection which provides protection from electric shock and burns is also available.

The following provides an overview on hard hat safety classes:

- **Class A** - helmets provide electrical protection from low-voltage conductors (less than 2,200 volts).
- **Class B** - helmets provide electrical protection from high voltage conductors (less than 20,000 volts).
- **Class C** – helmets provide only impact and penetration protection and since they are usually made of aluminum, which conducts electricity, that should not be used around electrical hazards.

General requirements for hard hats include:

- ◆ Materials used in helmets must be water-resistant and slow burning.
- ◆ Each helmet must consist of a shell and suspension system (such as a head band
- ◆ Helmets must have suspension systems (such as head bands) that are adjustable to prevent the helmet from falling off the head.
- ◆ Suspension systems must be worn in the correct direction (for example an adjustment strap in the back of head).
- ◆ Helmets and suspension systems (such as head bands) should be inspected daily, maintained as necessary, and replaced promptly when damaged.

3.2 EYE AND FACE PROTECTION

Eye and face protection is used to protect the eyes and face of workers from flying particles, molten metal, chemicals, welding arc, or bright light (such as radiant energy, UV, or infrared). Protection may include protective glasses, goggles, and face shields.

All personnel shall wear safety glasses with side shields for all operational areas. This will as a minimum be eye protective glasses. Any operation in which there is a hazard of fragmentation or impact from material to the face or eyes, further protection will be required.

All personnel who wear contact lenses should inform their supervisors that they are wearing them. They should have available an alternative pair of glasses and suction cups for removal of contact lenses should be available in first aid kits.

Any personnel working with chemicals or in any operation where there is a danger of being splashed shall wear appropriate eye and face protection. The type shall be assessed by the HSE discipline according to chemical and the task.

For all personnel performing welding or cutting operations will wear welding helmets or face shields equipped with the proper lens shade. Welding assistants and standby personnel should use similar equipment or goggles with the proper lens shade.

POTENTIAL HAZARDS RESULT FROM:

- Contact with flying particles, molten metal, chemicals, welding arc, lasers or radiant energy (such as bright light, UV, infrared)
- Not wearing safety glasses when welding shields are raised to inspect welds or use chipping hammer

Additionally, obscured vision due to dirty or scratched lenses may cause workers injuries (such as trips, falls, struck-by, collisions).

REQUIREMENTS AND EXAMPLE SOLUTIONS:

- Face shields or welding helmets (for example hoods) should be worn only over primary eye protection such as safety glasses or goggles.
- Safety glasses should include optical correction for workers who need corrective lenses, otherwise, cover lens or goggles must be provided
- Glasses or goggles must provide protection from hazards such as particles, objects, radiation, or liquids entering the eye from the sides as well as the front. Side shields (for example wrap-around, clip-on, slide-on) must be used.
- Metal-frame protective eyewear should not be used when electrical hazards may be present.
- Ensure that eye protection is cleaned frequently and replaced when necessary.

3.3 FOOT PROTECTION

Only approved safety steel toed and mid-sole footwear will be worn when working outside office areas. H&S department will issue one pair of safety toed and mid-sole footwear as required and will replace them as required. All footwear provided will be non-skid.

Workers may be at risk of crushing injuries due to contact with falling or rolling objects; as well as punctures from sharp objects.

ADDITIONAL HAZARDS INCLUDE CONTACT WITH:

- Electrical or electricity
- Molten metals
- Hot surfaces
- Chemicals
- Wet or slippery surfaces

Injuries may be prevented by the use of appropriate footwear.

POTENTIAL HAZARDS:

Workers may be exposed to injuries including:

- Crushing from falling objects,
- Crushing from rolling cylinders,
- Punctures from sharp objects,
- Burns or shocks from electrical hazards,
- Burns from molten metal or hot surfaces,
- Skin contact or burns from chemicals, or
- Slips and falls from wet or slippery surfaces.

REQUIREMENTS AND EXAMPLE SOLUTIONS:

- Workers must wear protective footwear when working in areas where there is a danger of falling or rolling objects or objects piercing the sole.

Examples include:

- Impact injuries from carrying or handling materials such as equipment, objects, parts, or heavy tools which could be dropped or from objects that may fall during work activities
- Compression injuries from work activities involving forklifts, gas cylinders, and heavy pipes, which could roll onto worker's feet
- Puncture injuries from sharp objects such as nails, screws, staples, scrap or sheet metal, which workers may step on
- Safety shoes or boots may be required to provide special electrical conduction or insulation to prevent electric shock or static electric spark.
- Chemical-resistant boots may be required to provide protection from caustic, reactive, toxic, or corrosive materials during cleaning, painting, or surface preparation.
- Slip-resistant soled shoes should be worn when working on slippery surfaces.

3.4 HEARING PROTECTION

Workers exposed to excessive noise must use appropriate PPE including ear plugs, muffs, or both when engineering or administrative controls are not feasible to reduce exposure.

POTENTIAL HAZARDS:

Some operations excessive noise, which may lead to hearing loss. Some of the loudest operations include:

- Abrasive blasting
- Needle gunning
- Scaling
- Grinding
- Metal straightening
- Carbon Arcing/Arc gouging
- Pneumatic pumps
- High-pressure steam or water cleaning
- Ventilation equipment

In any area of exposure or operation which continuously exceeds 85 dB(A) hearing protection must be worn. It must also be worn where relevant notices are displayed or when specific instructions to do so are given.

3.5 RESPIRATORY PROTECTION

Respiratory protection is used to protect workers from the effects of toxic, corrosive, or irritant vapours; and gases, dusts, mists, fumes, and fibbers when engineering controls are not adequate or feasible. Respirators used can range from simple disposable dust masks to more complex supplied air respirators.

POTENTIAL HAZARDS:

Workers may be exposed to hazardous atmospheres that result in:

- Being overcome by lack of oxygen
- Occupational illness due to long-term low-level exposures (for example asbestos, silica, lead)
- Acute or systemic illness from exposure to solvents paints and cleaners
- Acute respiratory damage due to exposure to corrosives (such as acids, gases, mists)
- Severe illness or even death from inhaling toxic materials (such as hydrogen sulfide, carbon monoxide).

RESPIRATORY PROTECTION INCLUDES THE FOLLOWING:

- In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials).
- Respirators must be provided when such equipment is necessary to protect the health of the worker.
- Respirators which are applicable and suitable for the purpose intended must be provided;

3.6 HAND AND BODY PROTECTION

Proper selection and use of appropriate hand and body PPE will prevent or minimize the potential for worker injuries due to chemical or physical hazards.

Appropriate gloves and protective clothing must be used to protect workers from hazards such as burns, cuts, electrical shock, amputation, and absorption or contact with chemicals. Type and material of gloves depends on the potential hazards, substances handled, and the working environment.

POTENTIAL HAZARDS:

Injuries and illnesses include:

- Skin absorption of harmful substances
- Cuts or lacerations
- Abrasions
- Punctures
- Nerve or tendon damage caused by exposure to vibration
- Chemical burns
- Thermal burns
- Heat stress, frostbite, and hypothermia due to harmful temperature extremes
- Shocks and burns from electricity

REQUIREMENTS AND EXAMPLE SOLUTIONS:

Note: No fabric (including leather, neoprene, latex) can provide protection against all potential hazards. It is important to select the appropriate glove and protective clothing for each specific hazard.

- Manufacture's data should be used to select appropriate fabric properties such as:
 - Chemical resistance
 - Thermal protection
 - Cut and puncture resistance
 - Non-electrically conductivity
- Workers should be able to remove gloves and protective clothing in a way that avoids skin or other contamination to themselves or others.
- Cooling vests or breathable fabric may be used to minimize heat stress.
- Appropriate clothing (for example insulation or water resistance) should be used when workers are exposed to cold or wet environments.
- Vibration-dampening PPE should be used when using vibrating tools (such as needle guns, grinders, chipping hammers).
- Non-conductive protection equipment (such as voltage-rated gloves) should be used around electrical equipment. Note: Highly flammable fabrics (for example nylon, polyester) should not be worn.
- PPE must be sized properly to prevent tripping, tearing, seam parting, or restricting worker movement.

3.7 PERSONAL FALL PROTECTION EQUIPMENT

When workers are exposed to fall hazards while working at elevations of more than 1.8 meters (6 feet), fall protection is required. Typically, guardrails or other barriers are used to protect workers. In situations where guardrails are not practical, or when working from two-point suspended scaffolding, personal fall arrest systems (such as safety harnesses, lifelines, lanyards) are required. In some situations, positioning device systems such as restraint (tether) lines or aerial lifts are used to provide protection from falling off an unguarded edge. Personal fall protection systems must:

- Prevent a worker from falling (positioning device systems), or
- Arrest the fall of workers without causing injuries.
- Prevent workers from striking or falling to a lower level.

Worker trauma from falls from elevated work surfaces can be minimized by the proper selection and use of personal fall protection systems.

POTENTIAL HAZARDS:

- Falls caused by failure to use fall protection
- Injuries due to improper use of fall protection equipment

REQUIREMENTS AND EXAMPLE SOLUTIONS:

When guardrails and other positive fall protection are not available to protect from falls, workers must use personal fall protection systems (such as harnesses, lanyards, lifelines)

TRAINING

Before use, workers must be trained to understand:

- Application limits (for example maximum permitted free falls, distance needed below to stop before hitting lower levels or objects, minimizing swing falls, etc.) of the equipment
- Proper hook-up, anchoring, and tie-off techniques
- Proper use, inspection, and storage of equipment
- Personal fall protection systems must not be used for other purposes such as hoisting materials.

INSPECTION

Personal fall protection systems must be inspected before each use and defective components must be removed from service.

Personal fall protection systems subjected to impact loading must be removed from service.

All employees shall wear the minimum PPE requirements at all times on site. Furthermore employees are responsible for ensuring they comply with any additional PPE requirements for the activity they are undertaking.

PPE MATRIX 1

Work Activity	PPE	Coveralls	Hard Hat	Steel toe footwear	Leg Protection Trousers	Gloves	Dust Mask	Respirator Cartridge type	Ear pugs	Ear Defender	Goggles	Face shield	Safety harness & Lines	Chemical resistant suit	Chemical resistant gauntlets	Rubber boots	Air flow hood, approved gauntlets (PVC gloves)	Safety Spec gasses with side shield	Welding helmet & gloves	Doesmeter / survey meter reading	Film badges	Disposable gloves shoe covers, respirator.
Acid Handling		X	X	X		X					X	X		X	X	X		X				X
Battery Maintenance		X	X	X		X					X	X			X			X				
Cement Handling		X	X	X		X	X				X							X				X
Chemical Handling		X	X	X		X		X			X	X		X	X	X		X				X
Chipping		X	X	X		X	X											X				
Confined Space Entry		X	X	X				X									X	X		X		
Degreasing		X	X	X							X	X		X	X			X				
Drilling		X	X	X		X	X		X									X				
Dust Atmospheres		X	X	X			X	X			X							X				X
Electrical		X	X	X														X				
Grinding		X	X	X		X	X		X		X	X						X				
Grit Blasting		X	X	X		X											X	X				X
Highwind Condition		X	X	X			X		X		X							X				
Height above 2 metres		X	X	X									X					X				
Jack Hammering		X	X	X		X	X		X	X	X	X						X				
Oil Spills		X	X	X										X	X	X		X				
Painting (Spray)		X	X	X		X		X			X							X				X
Radiography		X	X	X														X		X	X	
Refuelling		X	X	X		X		X			X	X		X	X			X				
Working in High Noise Area		X	X	X					X	X								X				
Wet weather conditions		X	X	X										X		X		X				
Cutting / Welding		X		X														X	X			
Work in vicinity of welding		X	X	X														X				
Sanding machine operations		X	X	X			X	X	X									X				
Site Clearance		X	X	X	X	X			X	X		X										

NOTES

TASKS OF MORE
HAZARDOUS NATURE
E.G.

- 1) CONFINED SPACE
ENTRY
- 2) TANK CLEANING
- 3) WORK OVER
WATER
WILL REQUIRE
SPECIFIC PPE.