

**FIRE FIGHTING AND SAFETY.**



## **1.0 INTRODUCTION**

Fifth Generation Out-Sourcing Company Ltd offers a wide spectrum of cutting edge services to ensure optimal customer experience. We combine best breed processes, technology, and a skilled workforce to create a world class customer experience. Through our Health Safety and Environment Division, we conduct Audits and Training with an aim to provide fire protection, safety awareness and safety solutions by installing, maintaining and servicing of firefighting equipment for clients.

Our Health, Safety, environmental audits and training adhere to recommended procedure set by law to ensure buildings are viable for use by the public. We conduct safety audits for schools, commercial buildings, hotels and all construction facilities intended for human utility. We also conduct Environmental Impact Assessment for projects.

Together with our partners – Trigger Enterprises Limited of Uganda, we supply, install and provide training and servicing of all range of Trigger branded firefighting equipment and fire suppression systems.

We offer solutions in the following areas:

- Fire system design
- Installation, Servicing and Maintenance of Fire Fighting Equipment.
- Sale of firefighting equipment
- Installation of fire suppression systems.
- Consultancy Services
- Real time camera enabled fire monitoring and detection systems.
- Smoke alarm for detection and reporting through internet wireless system.
- Heat, fire and smoke sensors and central alarm monitoring area.
  
- Training of firefighting techniques to fire Marshalls and basic fire prevention methods and techniques in schools, Hotels, Shops, Hospitals, Supermarkets, Industries, Companies Vehicles, trains, airplanes, residential homes offices, High raise buildings and common assembling areas

## **2.0 OUR VALUES AND COMMITMENT TO OUR CUSTOMERS**

### **2.1 Individuals**

As a company (and as individuals), we value integrity, honesty, openness, personal excellence, constructive self-criticism, continual self-improvement, and mutual respect.

Our clients are our greatest assets.

### **2.2 Clients**

We are committed to our customers and partners and have a passion for technology. We take on big challenges, and pride ourselves on seeing them through.

### **2.3 Accountability**

We hold ourselves accountable to our customers, partners, and employees by honoring our commitments, providing results, and striving for the highest quality. We're motivated and inspired every day by seeing our customers use our products to secure their people and business infrastructure. We run our business in much the same way, and believe our three core business divisions offer the greatest potential to serve our customers. We are committed long term to the mission of helping our customers realize their full potential. As we constantly update and improve our products, we want to continually evolve our company to be in the best position to accelerate new technologies as they emerge and to better serve our customers

## **3.0 EXECUTION PLAN**

Using our in-house software and Prince2 project management tools, we have solid and functioning monitoring tools that enable us to use technology to monitor and mitigate risks before they happen. Our software module can use previous lessons to be able to predict and guide our team on best practice and international methods.

#### 4.0 MANAGEMENT AND STAFFING PLAN

We recognise that strong management is key to the success of this plan. We have a management structure with clearly defined roles and responsibilities accordingly to facilitate and support in delivering the required output.

Our contact person for this assignment is Ms. Mary Wanjiku supported by Mr. Isaiah Ambata. Below are the contact details:

	<b>Primary Contact</b>	<b>Alternate Contacts</b>
<b>Name</b>	Mary Wanjiku Njoroge	Isaiah Ambata
<b>Title</b>	Out-Sourcing Manager	Technician
<b>Address</b>	P.O Box 46432 Nairobi	P.O Box 46432 Nairobi
<b>Mobile</b>	+254 722387401	+254 729162679
<b>Email</b>	<a href="mailto:mary@5thgenerationoutsourcing.com">mary@5thgenerationoutsourcing.com</a>	

We have a team of full time experienced and dedicated technicians that carry out service and maintenance of fire extinguishers.

#### 5.0 INSPECTION, MAINTENANCE AND TESTING PROCEDURES

We follow and adhere to Standards for Portable Fire Extinguishers DOSHS (Directorate of Occupational Safety and Health Services) guidelines for any inspection, maintenance, recharging and testing that is performed.

Table 1: Inspection, Maintenance and Testing procedures of Fire Extinguishers

<b>5.1</b>	<b>Inspection.</b>
<b>5.2</b>	<b>Frequency.</b> Fire extinguishers shall be inspected when initially placed in service and thereafter at approximately 30-day intervals. Fire Extinguishers shall be inspected, manually or by electronic means, at more frequent intervals when circumstances require.
<b>5.3</b>	<b>Procedures.</b> Periodic inspection of fire extinguishers shall include a check of at least the following items:
	<ul style="list-style-type: none"> <li>a. Location in designated place</li> <li>b. No obstruction to access or visibility</li> </ul>

- c. Operating instructions on nameplate legible and facing outward
- d. Safety seals and tamper indicators not broken or missing
- e. Fullness determined by weighing or “hefting”
- f. Examination for obvious physical damage, corrosion, leakage, or clogged nozzle
- g. Pressure gauge reading or indicator in the operable range or position
- h. Condition of tires, wheels, carriage, hose, and nozzle checked (for wheeled units)
- i. HMIS label in place

<b>5.4</b>	<b>Inspection Record keeping.</b>
<b>5.4.1</b>	Personnel making inspections shall keep records of all fire extinguishers inspected, including those found to require corrective action.
<b>5.4.2</b>	At least monthly, the date the inspection was performed and the initials of the person performing the inspection shall be recorded.
<b>5.4.3</b>	Records shall be kept on a tag or label attached to the fire extinguisher, on an inspection checklist maintained on file, or in an electronic method that provides a permanent record.
<b>5.5</b>	<b>Maintenance.</b>
<b>5.5.1</b>	<b>Frequency.</b> Fire extinguishers shall be subjected to maintenance at intervals of not more than one year, five years, or when specifically indicated by an inspection or electronic notification.
<b>5.5.1.1</b>	Stored-pressure types containing a loaded system agent shall be disassembled on an annual basis and subjected to complete maintenance.
<b>5.5.1.2</b>	A conductivity test shall be conducted annually on all carbon dioxide hose assemblies. Hose assemblies found to be defective or broken shall be replaced.
<b>5.5.1.3</b>	Pressure regulators provided with wheeled-type fire extinguishers shall be tested for outlet static pressure and flow rate in accordance with manufacturer’s instructions.
<b>5.5.2</b>	<b>Procedures.</b> Maintenance procedures shall include a thorough examination of the three basic elements of a fire extinguisher:
	<ul style="list-style-type: none"> <li>a. Mechanical parts</li> <li>b. Extinguisher agent</li> <li>c. Expelling means</li> </ul>

5.5.2.1	Internal examination during annual maintenance shall not be required for nonchargeable fire extinguishers, carbon dioxide fire extinguishers, or stored pressure fire extinguishers, except for those types specified in 6.3.1.1.
5.5.2.2	<b>Seals or Tamper Indicators.</b> At the time of the maintenance, the tamper seal of rechargeable fire extinguishers shall be removed by operating the pull pin or locking device. After the applicable maintenance procedures are completed, a new tamper seal shall be installed.
5.5.3	<b>Five-Year Maintenance.</b> Every five years (OSHA), stored-pressure fire extinguishers that require a five year (OSHA) hydrostatic test shall be emptied and subjected to the applicable maintenance procedures. The removal of the agent shall only be done using a listed halon closed recovery system. When the applicable maintenance procedures are performed during a periodic recharging or hydrostatic testing, the five year requirement shall begin from that date
5.5.3.1	No rechargeable fire extinguishers shall not be hydrostatic tested but shall be removed from service at a maximum interval of 12 years from the date of manufacture.
5.5.4	<b>Maintenance Recordkeeping.</b> Each fire extinguisher shall have a tag or label securely attached that indicates the month and year the maintenance was performed and that identifies the person performing the search.
5.6	<b>Recharging.</b>
5.6.1	<b>General.</b>
5.6.1.1	All rechargeable-type fire extinguishers shall be recharged after any use or as indicated by inspection or when performing maintenance.
5.6.1.2	<b>Leak Test.</b> After recharging, a leak test shall be performed on stored-pressure and self-expelling types of fire extinguishers.
5.6.2	<b>Frequency.</b>
5.6.2.1	<b>Pump Tank.</b> Every 12 months, pump tank water and pump tank calcium chloride-based antifreeze types of fire extinguishers shall be recharged with new chemicals or water, as applicable.

5.6.2.2	<b>Wetting Agent.</b> The agent stored-pressure wetting agent fire extinguishers shall be replaced annually. Only the agent specified on the nameplate shall be used for recharging.
5.6.2.3	<b>AFFF and FFFP.</b> The premixed agent in liquid charge-type AFFF (aqueous film-forming foam) and FFFP (film-forming fluoroprotein foam) fire extinguishers shall be replaced at least once every three years. The agent in solid charge-type AFFF fire extinguishers shall be replaced once every 5 years.
5.6.3	<b>Procedures.</b>
5.6.3.1	<b>Recharge Agents.</b> Only those agents specified on the nameplate or agents proven to have equal chemical composition, physical characteristics, and fire extinguishing capabilities shall be used. Agents listed specifically for use with that fire extinguisher shall be considered to meet these requirements.
5.6.4	<b>Recharge Recordkeeping.</b> Each fire extinguisher shall have a tag or label securely attached that indicates the month and year recharging was performed and that identifies the person performing the service. A “Verification of Service” (maintenance or recharging) collar in accordance with 4-4.4.2 shall also be attached to the extinguisher.
5.6.4.1	Liquefied gas, halogenated agent, and carbon dioxide extinguishers that have been recharged without valve removal shall not be required to have a “Verification of Service” collar installed following recharge.
5.6.4.2	Cartridge and cylinder-operated extinguishers shall not be required to have a “Verification of Service” collar installed.

## **6.0 INSPECTION, SERVICE AND MAINTENANCE SCHEDULE**

We can have designed inspection schedules (bi-monthly) and maintenance schedules (once every six months) for all firefighting equipment and systems. Dates to carry out those activities are planned and monitored in our management system. The following tools are used:

- Check Lists.
- Service and maintenance procedures.
- Work Sheets
- Progress reports

We endeavour to communicate in writing the actual inspection, service and maintenance dates well in advance. Proposed schedule is given below:

## **7.0 PRODUCTS AND SERVICE DELIVERY QUALITY CONTROL**

The quality process and measurement is based on the following components:

- Proven methodologies and standards;
- Effective monitoring procedures;
- Fifth Generation Outsourcing Company Limited utilises where appropriate;
- DOSHS Standards in the installation and maintenance of firefighting equipment.
- Materials safety data sheets for materials to be used;

On the other hand, all the products supplied and materials used are new with manufactures' warranty. We therefore confirm that the goods and services meet the technical requirements to ensure successful service delivery.

## **8.0 TRAINING PROGRAMMES**

### **8.1 Basic fire awareness training**

This training is basic and recommended for ALL staff members or occupants of the premises involved. It is also short and easily understood.

#### **Contents**

- Procedures to follow in case of Fire
- Fire Triangle
- Causes of Fires
- Classes of Fire
- Extinguishing Fires
- Types of Fire Extinguishers
- Operating Fire Extinguishers
- Operating Hose Reels
- Regular Equipment Checks
- Live Fire Practical Exercise
- Includes one certificate issued to the Company

### **8.2 One-day fire marshal training**

This training is recommended for individuals who are to be selected and trained as fire marshals for the whole premises (fire team). A sizeable number should be recommended per floor/wing or what is suitable for the premises. This enables them to be in charge as the first aiders too. It also enables them to check equipment and advise in the absence service providers.

#### **Contents**

- Fire Triangle (oxygen, fuel and heat)
- Classification of Fires and Causes of Fires
- Fire Extinguishers and Fire Fighting.
- Equipment Handling and Use.
- Equipment Checklist.
- Fire Points.
- Fire Prevention and Protection.

- Emergency Reporting.
- Fire Exit/Exit Door.
- Fire Escape Route.
- Fire Action (On Discovering Fire)
- Emergency Evacuation Procedure.
- Fire Assembly Point.
- Fire Drills.
- Employee/fire warden duties
- Functions of Fire Marshals
- Fire preparedness
- Installation of firefighting equipment/systems
- Handling and operations of Portable Fire Extinguishers
- Fire Hose Reel /Delivery Hose Running - Drill
- Landing Valves
- Smoke detectors/heat detectors
- Good House Keeping
- Equipment Checks Testing
- Fire risk assessments
- Live Fire Practical Exercise

Size of a class will vary from one institution to another to suit client's request and programmes. We can also arrange for tailor made classes for individuals and institutions.

## **9.0 TOOLS AND EQUIPMENT**

We have a state of the art tools and equipment in our main workshop as well as the mobile service workshops (trucks). These include:

- Pressurised Tanks
- Hydrostatic Testing machines
- Complete Tool Boxes, *etc*

## **10.0 SAFETY AND RISK MANAGEMENT PLAN**

Fifth generation outsourcing company limited is committed to the safety of the personnel and property in the environment we work in. the safety and Risk Management Plan is therefore based on:

### **10.1 Safety policy**

We have a safety policy which is clearly communicated to all our staff. This policy emphasises our commitment to safety and zero tolerance to accidents. All employees are expected to abide by this policy. Drug and alcohol test are carried out randomly to ensure that our staff comply with safety, 5<sup>th</sup> generation outsourcing company can't not put safety in the hands of those who are not safe.

### **10.2 Tool box talks**

This is part of every activity we undertake. Tool box talks are intended to bring together all employees who are going to perform a certain task. Tool box talks form an important part of the risk assessment and management process by collectively:

- ✓ Identifying the hazards/risk associated with the job.
- ✓ Deliberating and agreeing on the mitigation measures for the hazards already identified.
- ✓ Implementation of the measures agreed upon.

### **10.3 Personal protective equipment**

Personal protective equipment (PPEs) is provided to staff carrying out any job. Our mandatory PPEs include: Overalls, Hi-Vis vests, Safety shoes, Helmets, Transparent goggles, gloves and respirators. Other PPEs that are provided for specific tasks include: Safety harnesses, face shields, ear muffs, etc

### **10.4 Incident reporting and recording**

All incidents are reported and recorded. This is to enable the investigation of even the smallest and insignificant near miss. We believe, by eliminating incidents and near misses we greatly reduce the chances of an accident happening.

### **10.5 Safety review/audit**

We continually review our safety processes. This is to identify any loop holes in our systems for continuous improvement.

A rating is given at the end of the audit to show compliance or non-compliance.

## **10.6 Waste disposal management plan**

We are committed to preserving the environment by ensuring safe disposal of both toxic and non-toxic waste. For toxic substances like the Dry Chemical Powder, we collect them and dispose them off in gazetted dumping Sites.

## **11.0 CONCLUSION**

At Fifth Generation, we believe in customer satisfaction and long-term cordial relationship with our clients and networks. We believe we shall develop a long-term business relationship owing to the quality of the products and services we offer.

