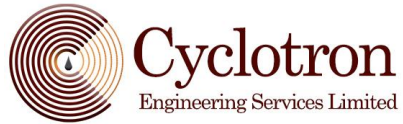


# Business HSE Controls



**Cyclotron**  
Engineering Services Limited

Health | Safety | Environment



## Cyclotron Engineering Services Limited

Administrative and Technical Publication

13 Gbenga Adeyinka 1<sup>st</sup> Street,

Off Freedom Way,

Lekki – Phase I,

Lagos State, Nigeria.

Phone: +234-813-861-2040

Website: [www.cyclotroneng.com](http://www.cyclotroneng.com)

e-mail: [info@cyclotroneng.com](mailto:info@cyclotroneng.com)



# Contents

Contents .....	3
Health, Safety and Environment Policy .....	5
Introduction .....	8
HSE Control Measures .....	9
The Hierarchy of Controls .....	9
Elimination .....	9
Substitution .....	10
Engineering Controls .....	10
Administrative Controls .....	10
Personal Protective Equipment (PPE) .....	11
Quality .....	12
Our Offices .....	13

## **Core Competencies**

- | Turbomachinery Operations & Maintenance |
- | Asset Integrity Management |
- | Equipment Installation and Commissioning |
- | Procurement and Delivery | Training and Certification |

## Health, Safety and Environment Policy

Our company's commitment to SHE is demonstrated by an annual leadership statement which is cascaded downwards to all our employees, vendors and sub-contractors.

### Health, Safety & Environment Policy

#### We are committed;

- Pursuing a goal of no hurt or harm to the people that are involved in our operations
- Protecting the environment where we operate and uphold our "duty of care" responsibilities for both the local and global environment.
- Systematically engage HSE matters and risks to drive susceptible business growth as well as sustain our business growth while striving to surpass stakeholders and host communities' expectations.
- Using materials and energy effectively and efficiently to ensure that our operations are sustainable.
- Promoting a culture in which all our employees share these commitments and manage HSE | activities as critical to business as any other actions/activities.

To meet our commitments, Cyclotron Engineering Services Limited will;

- Have a systematic approach to HSE management designed to ensure compliance with all applicable Nigerian Laws and Regulations as well as local and international standards to enhance continuous performance and improvement.
- Demonstrate visible and active leadership that engages employees and manage HSE with clear authorities and accountabilities.  
Conduct activities in a manner designed to minimize HSE risks to a level which is "As Low As Reasonably Practicable" (ALARP).
- Integrate HSE integrity, social equity and economic viability into or business processes.
- Provide our employees and contractors and clients with the capabilities, knowledge and resources necessary to instill personal ownership and motivation to achieve HSE excellence.
- Include HSE competencies, target and performance in the appraisal and reward of all staff.
- Drive improvement by setting targets with adequate resources for improvement and measure/appraise performance and reports sustain stakeholders' consistent support.
- Communicate this policy to all employees and highlight their roles in the implementation.

Cyclotron Engineering Services Limited will implement this policy through a documented Health, Safety and Environment Management System (HSE-MS) and will conduct periodic audits to verify compliance.

We are all empowered to stop all unsafe acts/conditions or when work/activity is not in compliance with this policy and commitment that is expected to guide our daily operations.



Joe Ekanem  
Managing Director

January 2, 2019

**Cyclotron Engineering Services Limited** operates an occupational Health and Safety management system based on requirements of:

- BS 8800:1996 Guide to Occupational Health and Safety Management
- OHSAS 18001:1999 Occupational Health and Safety Management System Specifications
- Health, Safety and Environment Guidance Publication HS(G)65 for Successful Health and Safety Management.

In terms of operation, the system is closely modelled in line with our existing ISO 19001:1994 Quality Management System.

All activities of the company are subject to formal risk assessment, and significant findings documented. Furthermore, concern for the environment forms a fundamental and integral element of our corporate strategy. Accordingly, **Cyclotron Engineering Services Limited** ensures that compliance with environmental protection and performance criteria enjoys high priority in all its business activities. We are also committed to providing and encouraging involvement in improved environmental performance, ensuring relevant procedures are followed, considering environmental provisions of clients, and complying with all relevant environmental regulations and other legal requirements.

**Environmental Policy**

**All operations performed under Cyclotron Engineering Services Limited;**

Shall be planned and executed in such a manner as to minimize any adverse effect or impact on the environment in which we operate. The thrust of the planning and execution of our work shall be environmental protection and preservation.

Our commitment to the environment embraces our staff, our contractors, our clients and the communities in our areas of operations.

**We commit to;**

- Comply with all applicable Environmental Regulations to ensure that we meet both local and international environmental standards
- Prevent pollution whenever and wherever possible.
- Train all our employees on our environmental programs and empower them to contribute and participate in our environmental responsiveness.
- Communicate our environmental commitment and efforts to our contractors, clients and host communities.
- Continually improve over time by measuring our environmental impact and by setting goals to reduce such impacts.



Joe Ekanem  
Managing Director

January 2, 2019

**Cyclotron Engineering Services Limited** operates an Environmental Management System (EMS) based on the requirements of BS EN ISO 14001:1996, covering work on the company's premises, work on the client's site, and work offsite. Established procedures are maintained for monitoring and measuring, on a regular basis, the key characteristics of operations and activities affecting the environment, performance, control and conformance with objectives and targets. All employees thus bear personal responsibility for both their own safety and protection, as well as for that of fellow employees and others on site.

Furthermore, **Cyclotron Engineering Services Limited** recognises that good health and safety management is essential and will contribute to our long-term business success. Accordingly, our organisation is committed to providing a safe place to work, promoting health and safety measures and accident prevention, encouraging involvement in improved safety performance, ensuring that procedures are followed, and giving consideration to the safety provisions of clients.

## Introduction

**Cyclotron Engineering Services Limited** (Cyclotron) believe that all our personnel, contractors and clients are eligible to the same level of protection regardless of where they are. To ensure a reliable approach in maintaining HSE, **Cyclotron Engineering Services Limited** have established control measured system supported by the management.

The processes, procedures, instructions and guidelines, as well as a mature system of control measure have been put in place to eliminate a hazard completely. Risk assessment may reveal the need to a temporary control measure until you can put a better and more permanent control in place. HSE controls is a key part of the process of identifying and evaluating hazards lab. In **Cyclotron Engineering Services Limited**, controls are usually located at the source where the hazard is being identity, along the path where the hazard travels, also with the personnel.



# HSE Control Measures

## The Hierarchy of Controls

The National Institute for Occupational Safety and Health (NIOSH) depicts the hierarchy of controls as an inverted pyramid with the most effective types of control measure (elimination) at the top and the least effective (personal protective equipment) at the bottom.



## Elimination

**Cyclotron Engineering Services Limited** considered the most effective control measures for achieving new a process. Maintaining the existing processes with the right equipment and materials that is required.

**Cyclotron Engineering Services Limited** is focus on eliminating hazard control completely which is based on removing a material or process causing a hazard. Elimination is the most effective of the five members of the hierarchy of hazard controls in protecting personnel, and where possible should be implemented before all other control methods.

The elimination of hazards is a major component to the philosophy of prevention through Design, which promotes the practice of eliminating hazards at the earliest design stages of a project through analysis using Job Hazard Analysis (JHA). Complete elimination of a hazard is often the most difficult control to achieve, **Cyclotron** ensures it is been addressed

at the start of a project allows personnel to make large changes much more easily without the need to retrofit or redo work. Also, **Cyclotron** ensure that all equipment is well- worn, check dates, and refer to manufacturer's recommendations.

### Substitution

In guaranteeing HSE control measure, **Cyclotron** ensure to substitute material or process with another that is less hazardous. Substitution is the second most effective of the five members of the hierarchy of hazard controls in protecting workers, after elimination. The concept of prevention through design underline and integrate more effective control methods such as elimination and substitution early in the design phase. Substitutions can also be made to processes and equipment. In making a substitution, **Cyclotron** monitored the hazards of the new material to ensure that the newly hazard is not unwittingly introduced causing "regrettable substitutions". Also, switching out processes, equipment, material, or other components, where applicable.

### Engineering Controls

**Cyclotron** ensure that engineering controls are designed to protect personnel from hazardous conditions by placing a barrier between the personnel and the hazard or by removing a hazardous substance through air ventilation and other protective means available.

Engineering controls is the third of five members of the hierarchy of hazard controls, which orders control strategies by their feasibility and effectiveness. **Cyclotron** has designed an engineering controls which is highly effective in protecting their personnel and will typically be independent of personnel interactions to provide this high level of protection. There are other forms of engineering controls measures which include:

- **Isolation:** Reduce or remove hazards by separation in time or space. (May be particularly helpful in a shared lab space where different types of chemicals are being used.)
- **Enclosure:** Place the material or process in a closed system.
- **Transportation:** Move hazardous materials where fewer personnel are present.
- **Protecting and shielding:** Install guards to provide protection from moving parts or electrical connections. Shielding provides protection from potential explosions
- **Ventilation:** Use emission hoods, fans, air ducts and air filters.

### Administrative Controls

**Cyclotron Engineering Services Limited** ensure adequate administrative controls in training, procedure, policy, shift designs that lessen the threat of a hazard to the personnel. Administrative controls typically change the behaviour of **Cyclotron** personnel. Administrative controls are the existing safety rules and protocols put in place for personnel in the lab to follow. Administrative controls measures include:

- Standard operating procedures and checklists.
- Training.
- Conducting a Job Hazard Analysis prior to the start of an experiment.
- Limiting the time, a person works with a certain material.
- Mandating that no one should work in the lab alone.

## **Personal Protective Equipment (PPE)**

Personal protective equipment (PPE) refers to protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection. The hazards addressed by protective equipment include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter. Protective equipment may be worn for job-related occupational safety and health purposes, as well as for sports and other recreational activities. "Protective clothing" is applied to traditional categories of clothing, and "protective gear" applies to items such as pads, guards, shields, or masks, and others. PPE is needed when there are hazards present. PPE has the serious limitation that it does not eliminate the hazard at the source and may result in employees being exposed to the hazard if the equipment fails.

Any item of PPE imposes a barrier between the wearer/user and the working environment. This can create additional strains on the wearer; impair their ability to carry out their work and create significant levels of discomfort. Any of these can discourage wearers from using PPE correctly, therefore placing them at risk of injury, ill-health or, under extreme circumstances, death. Good ergonomic design can help to minimise these barriers and can therefore help to ensure safe and healthy working conditions through the correct use of PPE.

Cyclotron occupational safety and health can use hazard controls and interventions to mitigate workplace hazards, which pose a threat to the safety and quality of life of personnel. Eye goggles, hearing protection, and protective clothing (e.g., lab coats and gloves) are the most recognizable and most used PPE in the lab.

In Cyclotron PPE is always essential, and especially critical in the following circumstances:

- When engineering controls are not feasible or they do not totally eliminate a hazard;
- As a temporary control while engineering controls are being developed;
- In emergency situations.

## Quality

**Cyclotron Engineering Services Limited** is also committed to providing clients with dedicated high-quality service, the expectations and needs of our clients taking pride of place.

Our emphasis is on error prevention, rather than correction. We operate to internationally recognised quality assurance standard in accordance with the requirements of ISO 9001:1994, and all our employees and suppliers are expected to comply with our quality creed, namely: **“The Right way, Every time”**

## Our Offices

**Head Office;** 13 Gbenga Adeyinka 1<sup>st</sup> Street  
Off Freedom Way,  
Lekki Phase 1,  
Lagos State

**Port Harcourt;** Plot 146, Trans-Amadi Industrial Layout  
Opposite Michelin,  
Port Harcourt,  
Rivers State

**Eket Office;** 42 Enen Ekpene Road  
Afaha Eket,  
P.O. Box 1097,  
Eket, Akwa Ibom State

**Phone:** +234-813-861-2040

**Email:** [info@cyclotroneng.com](mailto:info@cyclotroneng.com)

**Website:** [www.cyclotroneng.com](http://www.cyclotroneng.com)