



## PB INSTITUTE OF RESEARCH AND TECHNOLOGY

P.O Box 21457-00100

Nairobi - Kenya

Mobile: +254 721 214 795

Email: [info@pebblesinstitute.org](mailto:info@pebblesinstitute.org)

### Industrial Hygiene Monitoring Training

Duration: 10 days

On-Site

#### 01 Who Should Attend

- This course is ideal for;
- Industrial hygienists
- Safety officers
- Occupational health professionals
- Environmental health specialists
- Facility managers
- Compliance officers
- Supervisors
- Maintenance personnel
- Students of occupational health and safety
- Individuals interested in industrial hygiene monitoring
- Operations managers
- Training managers
- Laboratory technicians
- Chemical handlers
- Engineers



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### **02 About the Course**

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Industrial Hygiene Monitoring: Noise, Dust, and Chemical Exposure training equips professionals with the methodologies to assess and control workplace hazards related to noise, dust, and chemical exposures. This course focuses on analyzing exposure data, implementing monitoring strategies, and understanding the impact of effective control measures on worker health. Participants will learn to utilize air sampling equipment, conduct noise surveys, and understand the intricacies of exposure limits and regulatory compliance. By mastering industrial hygiene monitoring, professionals can enhance workplace safety, minimize occupational illnesses, and contribute to the creation of a secure and compliant environment. The critical importance of protecting worker health necessitates a comprehensive understanding of industrial hygiene monitoring techniques. This course delves into the nuances of hazard assessment, sampling methodologies, and data interpretation, empowering participants to develop and implement tailored exposure monitoring programs. By integrating scientific principles with practical safety techniques, this program enables individuals to lead industrial hygiene initiatives and contribute to the creation of a safe and healthy workplace.



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### **03 Workshop Objectives**

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- Understand the principles and importance of industrial hygiene monitoring.
- Implement techniques for conducting noise surveys and utilizing sound level meters.
- Understand the role of air sampling in assessing dust and chemical exposures.
- Implement techniques for selecting and utilizing appropriate air sampling equipment.
- Understand the principles of exposure limits and occupational exposure standards.
- Implement techniques for interpreting air sampling and noise monitoring data.
- Understand the role of control measures in mitigating noise, dust, and chemical exposures.
- Implement techniques for developing and implementing effective exposure control strategies.
- Understand the legal and regulatory requirements related to industrial hygiene monitoring.
- Implement techniques for conducting industrial hygiene audits and inspections.
- Understand the challenges and opportunities of monitoring diverse workplace exposures.
- Understand the role of employee training and participation in industrial hygiene monitoring.
- Develop strategies for continuous improvement in industrial hygiene monitoring practices.

### **04 Module Topics**

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#### **Module 1: Foundations of Industrial Hygiene Monitoring**

- Principles and importance of industrial hygiene monitoring.
- Understanding the relationship between workplace exposures and health risks.
- Benefits of effective exposure monitoring programs.
- Historical context and evolution of industrial hygiene.

#### **Module 2: Noise Surveys and Sound Level Meters**



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- Techniques for conducting noise surveys and utilizing sound level meters.
- Implementing noise monitoring strategies and procedures.
- Utilizing noise dosimeters and measurement software.
- Managing noise measurements.

### **Module 3: Air Sampling for Dust and Chemicals**

- Role of air sampling in assessing dust and chemical exposures.
- Understanding air sampling techniques and strategies.
- Implementing air sampling procedures and data analysis.
- Managing air sampling.

### **Module 4: Air Sampling Equipment Utilization**

- Techniques for selecting and utilizing appropriate air sampling equipment.
- Implementing equipment calibration and maintenance procedures.
- Utilizing air sampling devices and measurement software.
- Managing equipment utilization.

### **Module 5: Exposure Limits and Occupational Exposure Standards**

- Principles of exposure limits and occupational exposure standards.
- Understanding permissible exposure limits (PELs) and threshold limit values (TLVs).
- Implementing exposure limit compliance strategies.
- Managing exposure limits.

### **Module 6: Data Interpretation**

- Techniques for interpreting air sampling and noise monitoring data.
- Implementing data analysis and reporting procedures.
- Utilizing exposure data for risk assessment and control.
- Managing data interpretation.

### **Module 7: Control Measures for Exposures**



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- Role of control measures in mitigating noise, dust, and chemical exposures.
- Understanding the hierarchy of controls (elimination, substitution, engineering, administrative, PPE).
- Implementing control selection and implementation strategies.
- Managing exposure controls.

### **Module 8: Exposure Control Strategy Development**

- Techniques for developing and implementing effective exposure control strategies.
- Implementing control implementation and monitoring procedures.
- Utilizing control verification and documentation.
- Managing strategy development.

### **Module 9: Legal and Regulatory Requirements**

- Legal and regulatory requirements related to industrial hygiene monitoring.
- Implementing compliance with OSHA and other relevant standards.
- Utilizing legal registers and compliance tools.
- Managing legal compliance.

### **Module 10: Industrial Hygiene Audits and Inspections**

- Techniques for conducting industrial hygiene audits and inspections.
- Implementing audit checklists and inspection protocols.
- Utilizing audit findings for corrective actions.
- Managing audits and inspections.

### **Module 11: Monitoring Diverse Workplace Exposures**

- Challenges and opportunities of monitoring diverse workplace exposures.
- Implementing monitoring strategies in different industries and environments.
- Utilizing monitoring techniques for various types of hazards.
- Managing monitoring in diverse contexts.

### **Module 12: Employee Training and Participation**



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- Role of employee training and participation in industrial hygiene monitoring.
- Implementing employee involvement and feedback mechanisms.
- Utilizing employee-led monitoring initiatives.
- Managing employee participation.

### **Module 13: Continuous Improvement in Industrial Hygiene Monitoring**

- Strategies for continuous improvement in industrial hygiene monitoring practices.
- Implementing program evaluation and improvement methods.
- Utilizing feedback mechanisms and performance metrics.
- Managing continuous improvement.

### **Module 14: Case Studies: Industrial Hygiene Monitoring**

- Analyzing real-world examples of industrial hygiene monitoring.
- Highlighting best practices and effective implementation solutions.
- Documenting project outcomes and impact.
- Industry and industrial hygiene expert testimonials.

### **Module 15: The Future of Industrial Hygiene Monitoring**

- Exploring emerging trends and technologies in industrial hygiene monitoring.
- Integrating digital tools, sensor networks, and real-time monitoring systems.
- Adapting to evolving safety regulations and exposure standards.
- Building resilient and proactive industrial hygiene monitoring systems