

**COURSE OVERVIEW HE0851**  
**Certified Incident Investigation Reporting**

**Course Title**

Certified Incident Investigation Reporting

**Course Date/Venue**

February 04-08, 2024/The Mouna Meeting Room, The H Hotel, Sheikh Zayed Road, Dubai, UAE

**Course Reference**

HE0851

**Course Duration/Credits**

Five days/3.0 CEUs/30 PDHs



**Course Description**



***This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.***



Incident investigation and reporting describe the process and responsibilities for internal reporting of HSE incidents which occurs in company's operational area or related to company's activity. A high percentage of incidents are caused by human error and lack of proper training. The number of such incidents may be greatly reduced by thorough investigation of incidents, establishing root causes, implementing effective corrective and preventative actions. This course is designed to introduce the attendees to established methods, of achieving this in a structured and proven manner.



This course is designed to provide participants with a comprehensive knowledge and skills on the techniques and procedures for incident investigation and reporting. It covers the incident and accident investigation process and the related company's procedures; the common causes of incidents and the various types of incident to investigate; the incident investigation techniques; the link between investigation and risk assessment, framework for incident investigation and analysis; and the analyses and commutate data.

The root cause analysis presented in this course is designed for use in investigating and categorizing the root causes of events with safety, health, environmental, quality, reliability and production impacts, although the exercises and case studies used in this course are predominantly those having safety and health impacts.

OSHA Incident [Accident] Investigations: A Guide for Employers (2015) will be used as guidance document provides participants with a systems approach to identifying and controlling the underlying or root causes of all incidents in order to prevent their recurrence. NFPA 921 will also be used to set the bar for scientific-based investigation and analysis of fire and explosion incidents.

By the end of the course, participants will be able to employ incident investigation to identify true root causes; recognize the root cause analysis, intermediate and root cause of incidents, cause tree analysis, fault tree analysis and events and causal factors analysis; carryout various strategies to ensure the organization learns from safety failures; employ structured data collection, investigating, interviewing and story boarding; apply applicable accident investigation procedures and investigate accidents and incidents in a professional manner; develop conclusions and recommendations; illustrate company's HSE incidents reporting flow diagram; and perform proper incident reporting.

API RP 585, Pressure Equipment Integrity Incident Investigation, recommended practice will be used as case study during the course in addition to API Investigation Tiers and Root Cause Analysis

### **Course Objectives**

Upon the successful completion of this course, each participant will be able to:-

- Get certified as a “*Certified Incident Investigator*”
- Apply and gain a good working knowledge on incident reporting and investigation
- Discuss incident and accident investigation process and define related company's procedures
- Identify the common causes of incidents and the various types of incident to investigate
- Prevent, report and apply incident investigation techniques
- Determine the link between investigation and risk assessment as well as the framework for incident investigation and analysis
- Collect analyses and commutate data
- Employ incidents investigation to identify true root causes
- Recognize the root cause analysis, intermediate and root cause of incidents, cause tree analysis, fault tree analysis and events and causal factors analysis
- Carryout various strategies to ensure the organization learns from safety failures
- Employ structured data collection, investigating, interviewing and story boarding
- Apply applicable accident investigation procedures and investigate accidents and incidents in a professional manner
- Develop conclusions and recommendations, illustrate company's HSE incidents reporting flow diagram and proper incident reporting
- Recognize OSHA Incident [Accident] Investigations, NFPA 921, API RP 585, and ISO 45001 standards

## Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive “Howard Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials, sample video clips of the instructor’s actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.

## Applicable Codes & Standards

This course is based on the following Codes & Standards: -

- NFPA (National Fire Protection Association) 921 Standard: This standard provides guidelines for fire and explosion investigations, including procedures for evidence collection and analysis, and guidelines for determining the origin and cause of a fire or explosion.
- OSHA (Occupational Safety and Health Administration) Standards: OSHA provides guidelines for employers to follow in the event of a workplace incident. The guidelines include reporting requirements, investigations, and corrective actions to prevent future incidents.
- API (American Petroleum Institute) RP (Recommended Practice) 754: This standard provides guidelines for process safety performance measurement, including incident investigation, root cause analysis, and corrective action implementation.
- ISO (International Organization for Standardization) 45001 Standard: This standard provides guidance for establishing and maintaining an Occupational Health and Safety Management System (OHSMS). It includes guidelines for conducting incident investigations, analyzing root causes, and implementing corrective actions.
- ANSI (American National Standards Institute) Z16.2 Standard: This standard provides a framework for conducting incident investigations and includes guidelines for reporting and analysis.

## Who Should Attend

This course provides an overview of all significant aspect and considerations of incident investigation and reporting for managers, team leaders, engineers, superintendents, supervisors and those in-charge of incident investigation or reporting.

## Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

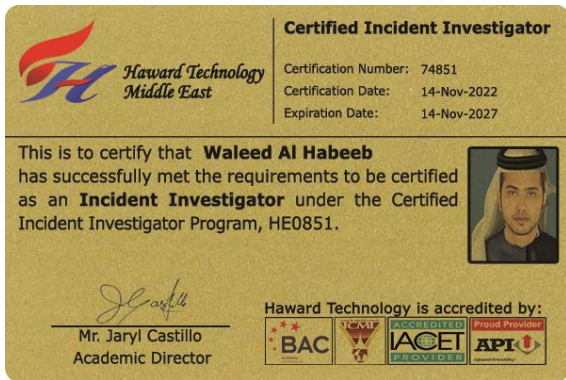
**Course Certificate(s)**

- (1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Successful candidate will be certified as a “*Certified Incident Investigator*”. Certificates are valid for 5 years.

**Recertification is FOC for a Lifetime.**

**Sample of Certificates**

The following are samples of the certificates that will be awarded to course participants:-



- (2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

\* Haward Technology \* CEUs \* Haward Technology \* CEUs \* Haward Technology \* CEUs \* Haward Technology \*



**Haward Technology Middle East**

Continuing Professional Development (HTME-CPD)

CEUs

### CEU Official Transcript of Records

**TOR Issuance Date:** 14-Nov-22

**HTME No.** 74851

**Participant Name:** Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE0851	Certified Incident Investigator	November 10-14, 2022	30	3.0

**Total No. of CEU's Earned as of TOR Issuance Date** **3.0**

**TRUE COPY**



Jaryl Castillo  
Academic Director

Haward Technology has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2013 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology is accredited by











P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

\* Haward Technology \* CEUs \* Haward Technology \* CEUs \* Haward Technology \* CEUs \* Haward Technology \*

## Certificate Accreditations


Certificates are accredited by the following international accreditation organizations: -

- 
The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

- 
British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council for Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

## Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

**Course Instructor(s)**

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



**Mr. Ahmed Mady** is a **Senior HSE Consultant** with over **40 years** of field experience. He is well-versed in the areas of **Environmental Management System (EMS), Management System Auditing**, Occupational Health, Safety & Environment (HSE), **Environmental & Waste Management**, Environmental Management & Technology (EMT), **Environmental Pollution & Control**, Environmental Impact Assessment (EIA), **Waste Management & Environmental Protection, HAZMAT, HAZCOM, Accident & Incident Investigation, Emergency Response, Hazard Recognition, Hazard Assessment, Risk Control, Risk Monitoring Techniques**, Radioactive Chemicals, **Emergency Procedures, First Aid & PPE, MSDS, Chemical Hazards, Chemical Monitoring & Protection, Chemical Spill Clean Up, Strategic Planning, Security Management, Crisis Management, Environmental Awareness, Search & Rescue Operations, HSE Management, Risk Analysis Evaluation & Management, Security Operations Management, Investigation & Security Surveying, Security Crisis Management, Corporate Security Planning, Strategic Analysis, Strategy Selection & Implementation, Security Policies & Procedures, Logistics Management, Systems Analysis & Design and Organization Procedure Evaluation & Auditing.**

During his service, he had been tasked as the **Chief Information Directorate** of the **Ministry of Civil Aviation** and the **Chief Engineering Analyst, On-Scene Commander (OSC) & Incident Commander (IC)** in the **Air Force** and was responsible for a team of engineers supporting all engineering studies, modifications, aging studies and maintenance analysis. Being a **Board Member** of the **Aviation Information Technology Center**, he holds control of the overall strategies and procedures for the ministry, contracting for major IT projects, supervising all IS activities in the aviation sector and ensuring quality and success of delivery. He had likewise served as the **Commander** of the **Air Force** and had worked closely with the **Logistics Computer Center** wherein he gave out direction on **Operational & Tactical Logistics Planning** and **Strategic Military Logistics** to numerous high ranking officials, and at the same time **commanding flying Air Force maintenance squadron logistics field activities**. Mr. Ahmed retired in the service as a **Major General**.

Earlier in his career, Mr. Ahmed had occupied several challenging roles with several large Logistics companies as their **General Manager, Maintenance Engineer, Systems Analyst, Training Branch Chief, Systems & Communication Engineer, Computer Programmer and Logistic Instructor**. Moreover, he has worked as the **Project Manager** contracted by **KNPC** for the year 2014-2016 in delivering **Certified Programs** for **Kuwaiti Contractor Employee** (Electrical, Mechanical & Pipefitting, Welding & Fabrication, Process Operator, Instrumentation & Control). Further, he has travelled all over Europe, Asia and the Americas joining numerous conferences and workshops with the **Ministry of Foreign Affairs** and international companies such as **IBM, System Science Corporation (SSC)** and **International Air Transport Association (IATA)**.

Mr. Ahmed has a **Bachelor** degree in **Mechanical Engineering**. Further, he has gained **Diplomas** on **Civil Aviation Engineering, Islamic Studies** and **Information Systems & Technology**. Moreover, he is a **Certified Internal Verifier** by **City & Guilds Level 4 Certificate** in **Leading the Internal Quality Assurance of Assessment Processes & Practice** and **Certified Assessor** in **Level 3 Certificate in Assessing Vocational Achievement** under the **TAQA Qualification (Training, Assessment & Quality Assurance)**, a **Certified Internal Verifier Level 2 & 3 NVQ Processing Operations: Hydrocarbons** by the **British City & Guilds**, a **Certified Internal Verifier/Trainer/Assessor** by the **British Institute of Leadership & Management (ILM)** and a **Certified Instructor/Trainer**. Further, he has delivered various trainings, workshops and conferences worldwide.

### **Course Fee**

**US\$ 5,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

### **Course Program**

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

#### **Day 1: Sunday, 04<sup>th</sup> of February 2024**

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	<b>PRE-TEST</b>
0830 – 0900	<b>Introduction to Incident Investigation</b>
0900 – 0930	<b>Principles of Accident Investigation</b>
0930 – 0945	Break
0945 – 1030	<b>Benefits of Accident Prevention</b>
1030 – 1120	<b>Company's Related Definitions/Procedures</b>
1120 – 1230	<b>Common Causes of Incidents</b>
1230 – 1245	Break
1245 – 1320	<b>Company's Definitions for Incidents, Near Misses, etc</b>
1320 – 1420	<b>Types of Incident to Investigate</b>
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day One

#### **Day 2: Monday, 05<sup>th</sup> of February 2024**

0730 – 0830	<b>Preventing Incidents</b>
0830 – 0930	<b>Reporting Incidents</b>
0930 – 0945	Break
0945 – 1030	<b>Incident Investigations</b>
1030 – 1120	<b>Investigation Techniques</b>
1120 – 1230	<b>Accident Reporting &amp; Scope of Investigation</b>
1230 – 1245	Break
1245 – 1330	<b>Accident Investigation Process using ISO 45001 Clause 10.2</b>
1330 – 1420	<b>Stages of Accident Investigation</b>
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day Two

#### **Day 3: Tuesday, 06<sup>th</sup> of February 2024**

0730 – 0830	<b>On Site Investigation Process</b>
0830 – 0930	<b>The Link between Investigation &amp; Risk Assessment</b>
0930 – 0945	Break
0945 – 1030	<b>Framework for Incident Investigation &amp; Analysis</b>
1030 – 1120	<b>Root Cause Analysis</b>
1120 – 1230	<b>Identifying Intermediate &amp; Root Causes of Incidents using OSHA Incident [Accident] Investigations: A Guide for Employers</b>
1230 – 1245	Break
1245 – 1330	<b>Cause Tree Analysis</b>
1330 – 1420	<b>Fault Tree Analysis</b>
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day Three



**Day 4: Wednesday, 07<sup>th</sup> of February 2024**

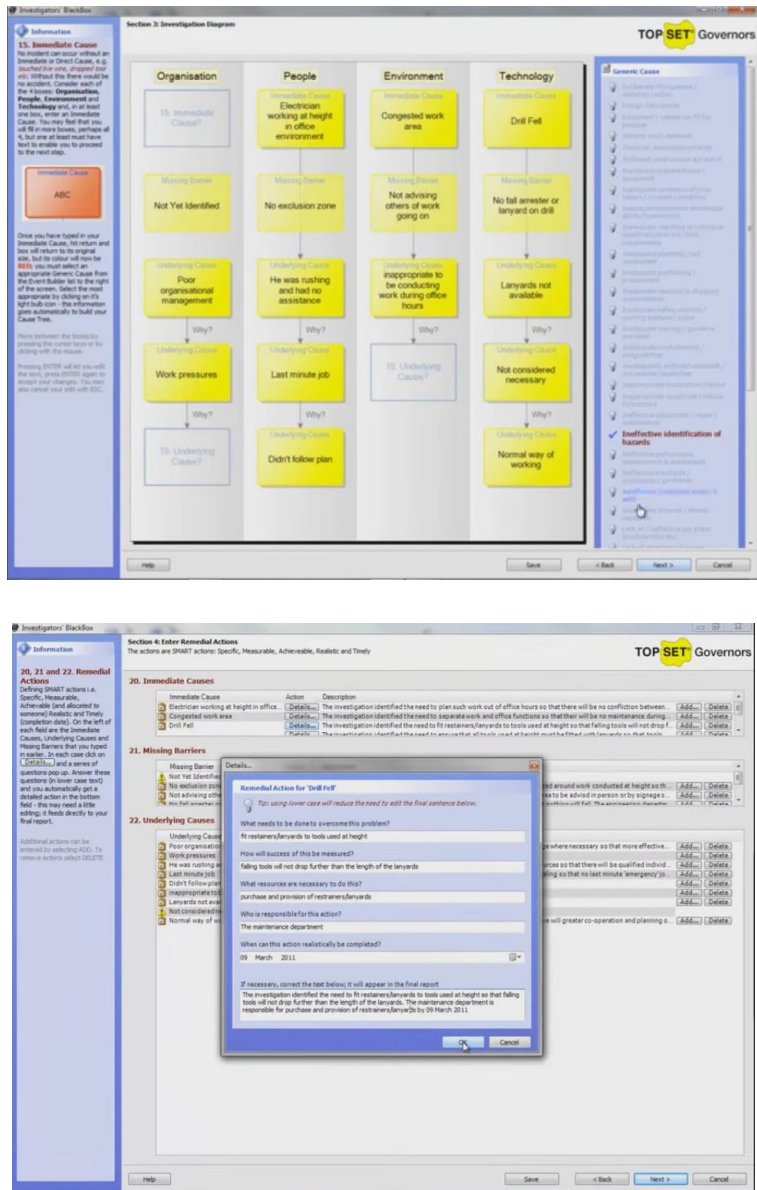
0730 – 0830	<b>Basic Competencies of Human Factors</b>
0830 – 0930	<b>Events &amp; Causal Factors Analysis</b>
0930 – 0945	Break
0945 – 1100	<b>Data to Include in Investigation Reports</b>
1100 – 1230	<b>Structured Data Collection</b>
1230 – 1245	Break
1245 – 1330	<b>Investigating Incident using ISO 45001</b> Step 1: Preserve & Document the Scene • Step 2: Collect Information • Step 3: Determine the Root-causes • Step 4: Implement Corrective Actions • Step 5: Feedback to Person(s) Reporting the Incident
1330 – 1420	<b>Witness Interview Techniques</b>
1420 – 1430	<b>Recap</b> Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Four

**Day 5: Thursday, 08<sup>th</sup> of February 2024**

0730 – 0830	<b>Storyboarding, ISO 45001 Incident Reporting &amp; Investigation Procedure Template</b>
0830 – 0930	<b>Developing Conclusions &amp; Recommendations</b>
0930 – 0945	Break
0945 – 1030	<b>Company's HSE Incidents Reporting Flow Diagram</b>
1030 – 1120	<b>Reporting Incidents on My HSSE</b>
1120 – 1215	<b>Practical Exercise on Root Cause Analysis (Examples of Incidents and Workshop to Investigate a Sample) using NFPA 921 of Fire &amp; Explosion Incidents</b>
1215 – 1230	Break
1230 – 1300	<b>Practical Exercises &amp; Case Study using API RP 585, Pressure Equipment Integrity Incident Investigation &amp; Recommended Practice</b>
1300 – 1315	<b>Course Conclusion</b>
1315 – 1415	<b>COMPETENCY EXAM</b>
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

### Simulator (Hands-on Practical Sessions)

Practical session will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the simulator “BlackBox simulator”.



**Section 3: Investigation Diagram**

Organisation	People	Environment	Technology
Immediate Cause?	Electrician working at height in office environment	Congested work area	Drill Fall
Missing Barriers	Missing Barriers	Missing Barriers	Missing Barriers
Not Yet Identified	No exclusion zone	Not advising others of work going on	No fall arrester or lanyard on drill
Underlying Cause	Underlying Cause	Underlying Cause	Underlying Cause
Poor organisational management	He was rushing and had no assistance	Poor organisational management inappropriate to be conducting work during office hours	Lanyards not available
Why?	Why?	Why?	Why?
Work pressures	Last minute job	Underlying Cause?	Not considered necessary
Why?	Why?	Why?	Why?
Underlying Cause?	Underlying Cause	Underlying Cause	Underlying Cause
	Didn't follow plan		Normal way of working

**Section 4: Enter Remedial Actions**

Immediate Causes	Action	Description
Electrician working at height in office		The investigation identified the need to plan each work out of office hours so that there will be no confusion between...
Congested work area		The investigation identified the need to separate work and office functions so that there will be no maintenance during...
Drill Fall		The investigation identified the need to fit restainers/lanyards to tools used at height so that falling tools will not drop...

**Remedial Action for Drill Fall**

Tip: using lower case will reduce the need to edit the final sentence below.

What needs to be done to overcome this problem?  
Fit restainers/lanyards to tools used at height

How will success of this be measured?  
Falling tools will not drop further than the length of the lanyards

What resources are necessary to do this?  
purchase and provision of restainers/lanyards

Who is responsible for this action?  
The maintenance department

When can this action realistically be completed?  
09 March 2011

If necessary, correct the text below; it will appear in the final report.  
The investigation identified the need to fit restainers/lanyards to tools used at height so that falling tools will not drop further than the length of the lanyards. The maintenance department is responsible for purchase and provision of restainers/lanyards by 09 March 2011.

### BlackBox Software Tool

### Course Coordinator

Kamel Ghanem, Tel: +971 2 30 91 714, Email: [kamel@haward.org](mailto:kamel@haward.org)