COURSE OVERVIEW HE2015
Effective Incident Investigation

Course Title
Effective Incident Investigation

Course Date/Venue
Session 1: June 22-26, 2025/Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
Session 2: September 14-18, 2025/Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE

Course Reference
HE2015

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.

This course is designed to provide participants with a detailed and up-to-date overview of Effective Incident Investigation. It covers the incident, accident, near-miss, unsafe act/condition and the importance and objectives of incident investigation; the types and classifications of incidents; the role of incident investigation in safety management; the legal and regulatory considerations, investigation principles and ethics and initial response to incidents; and the investigation, collecting physical evidence, document and data collection.

During this interactive course, participants will learn the incident causation models, root cause analysis (RCA) fundamentals; using the 5 Whys technique, fishbone (Ishikawa) diagrams, fault tree analysis (FTA) and human and organizational factors analysis; the hierarchy of controls for corrective actions, SMART recommendations, investigation report and communicating investigation findings; the verification and follow-up, learning from incidents across the organization, root cause analysis and reporting; incident investigation effectiveness, incident investigation program; and the roles and responsibilities in policy, common challenges and how to overcome them.

Course Objectives

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

- Apply and gain an in-depth knowledge on effective incident investigation
- Define incident, accident, near-miss, unsafe act/condition and the importance and objectives of incident investigation
- Discuss the types and classifications of incidents, the role of incident investigation in safety management
- Recognize legal and regulatory considerations, investigation principles and ethics and initial response to incidents
- Plan the investigation, collecting physical evidence, document and data collection
- Prepare for interviews, creating visual timelines and human factors in evidence collection
- Analyze incident causation models, root cause analysis (RCA) fundamentals and apply using the 5 Whys technique, fishbone (Ishikawa) diagrams, fault tree analysis (FTA) And Human and Organizational Factors Analysis
- Discuss hierarchy of controls for corrective actions, develop SMART recommendations, write the investigation report and communicating investigation findings
- Employ verification and follow-up, learn from incidents across the organization, root cause analysis and reporting
- Measure incident investigation effectiveness, create an incident investigation program as well as discuss the roles and responsibilities in policy, common challenges and how to overcome them

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of effective incident investigation for HSE professionals and safety officers, supervisors and line managers, incident investigation team members, operations and maintenance personnel, quality assurance and risk management personnel, emergency response and security staff and those involved in reporting or responding to incidents.

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 Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- 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.

- 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.

Accommodation

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

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. John Taljard is an **International Health**, **Safety & Environment** (**HSE**) **Expert** within **Oil**, **Gas** and **Petrochemical** industries. His expertise includes **Accident/Incident Investigation & Risk Management**, **Risk Assessment** within Production Operation, **Hazard Identification**, **Quantified Risk Assessment**, **Process Hazard Analysis** (**PHA**), **Construction Safety** (**STOP**), **Process Safety Management**, **HAZOP Studies & Leadership**, **FMEA**, Waste Management, Industrial Effluents, **Hazardous Material**, Chemical Handling, **Firefighting**, Emergency Response Services, **HAZCOM**, **HAZWOPER** and **HAZMAT** with over **30 years** of practical experience in the **process** industry. His wide experience also includes **Environmental Management** (**ISO 14001**), **Safety Management** (**OHSAS 18001**), **Quality Management** (**ISO 9001**). He is the **Founder** of **ISTEC**, an international health & safety management and consultancy company where he is greatly involved in the development and implementation of **SHEQ standards & procedures**, **HAZOP Studies**, **HAZOP Leadership**, **FMEA**, **PHA**, operational safety guidelines, inspections & auditing techniques.

While Mr. Taljard has been very active in the process industry for almost three decades, he has likewise headed Consultancy projects for major **petrochemical**, aviation, engineering & construction, mining & chemical industries. In all his projects, he utilizes a systems approach which includes **risk management**, **process safety**, health & environmental management, human behaviour and quality management. Furthermore, he has come to share his expertise through the **numerous international trainings** he has held on **PHA**, **HAZOP**, **Risk Assessment**, Handling **Hazardous Materials** & Chemicals, Petroleum Products Handling & Transportation, **Fire Fighting & Fire Rescue**, **Safety Auditing**, **Hazard Identification** & Site Inspection and **Accident Investigation** for several significant clientele among these are **ARAMCO**, **SABIC**, **ZADCO**, **ORPC**, **KOTC**, and **AADC**. Moreover, he completed various assignments as a consultant, trainer, facilitator, auditor & designer and conducted numerous licensed international Safety, Technology and Auditing Awareness & Implementing training courses including **IMS**, **ISO 9001**, **ISO 14001**, **ISO 27001**, **ISO 17799**, **OHSAS 18001** audits & assessments. With his accomplishments and achievements, he had been a **Safety Superintendent**, **Senior Safety Official** and **Senior Process Controller** for several international petrochemical companies.

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 Program

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

Day 1

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Introduction to Incident Investigation*** *Definitions: Incident, Accident, Near-Miss, Unsafe Act/Condition • Importance and Objectives of Incident Investigation • Legal, Organizational, and Moral Obligations • Incident Reporting versus Incident Investigation*
0930 – 0945	*Break*
0945 – 1030	***Types & Classifications of Incidents*** *Injury and Illness Incidents • Property Damage and Environmental Incidents • Near-Miss and Process Safety Events • High-Potential (HiPo) and Significant Events*
1030 – 1130	***The Role of Incident Investigation in Safety Management*** *Link to HSE Management Systems (ISO 45001, OSHA, API RP 754) • Preventive versus Reactive Safety Approach • Continuous Improvement and Learning Culture • Role in Safety KPIs and Performance Metrics*
1130 – 1215	***Legal & Regulatory Considerations*** *National and International Regulations (OSHA, ILO, Local Law) • Employer's Duties and Rights of Workers • Notification Timelines and Reporting Formats • Implications of Non-Compliance*
1215 – 1230	*Break*
1230 – 1330	***Investigation Principles & Ethics*** *Blame-Free and Learning-Focused Investigations • Maintaining Confidentiality and Integrity • Avoiding Assumptions and Bias • Role of Honesty and Transparency*
1330 – 1420	***Initial Response to Incidents*** *Securing the Scene and Ensuring Safety • Immediate Notifications and Escalation Protocols • Preserving Physical Evidence • Forming the Investigation Team*
1420 – 1430	***Recap*** *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 One*

Day 2

0730 – 0830	***Planning the Investigation*** *Investigation Scope and Objectives • Roles and Responsibilities of Investigation Team • Planning Tools and Checklists • Timeline and Resource Allocation*
0830 – 0930	***Collecting Physical Evidence*** *Types of Physical Evidence (Equipment, Materials, Tools) • Photographing and Sketching the Scene • Labeling, Logging, and Preserving Items • Avoiding Evidence Contamination*
0930 – 0945	*Break*

0945 – 1100	***Document & Data Collection*** *Incident Reports, Work Permits, SOPs, Maintenance Logs • CCTV Footage, SCADA Data, Operator Logs • Inspection, Audit, and Training Records • Material Safety Data Sheets (MSDS), Technical Drawings*
1100 – 1215	***Witness Interviews*** *Preparing for Interviews (Question Design and Scheduling) • Conducting Interviews Ethically and Effectively • Dealing with Stress, Emotions, and Conflicting Statements • Recording and Validating Statements*
1215 – 1230	*Break*
1230 – 1330	***Timeline & Sequence of Events*** *Creating Visual Timelines • Establishing Sequence Before, During, and After the Incident • Identifying Gaps and Inconsistencies • Using Event Charts or Incident Maps*
1330 – 1420	***Human Factors in Evidence Collection*** *Influence of Fatigue, Stress, Distractions • Situational Awareness and Perception Errors • Organizational Culture and Leadership Tone • Human Error Categorization*
1420 – 1430	***Recap*** *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 Two*

Day 3

0730 – 0830	***Incident Causation Models*** *Domino Theory and Heinrich's Model • Swiss Cheese Model (James Reason) • Energy Transfer Model • Loss Causation Model (Bird & Loftus)*
0830 – 0930	***Root Cause Analysis (RCA) Fundamentals*** *Definition and Purpose of RCA • Direct, Indirect, and Root Causes • Root Cause versus Immediate Cause • Steps in Structured RCA*
0930 – 0945	*Break*
0945 – 1100	***Using the 5 Whys Technique*** *How to Apply 5 Whys Properly • Avoiding Common Pitfalls • Linking Technical and Behavioral Causes • Documenting and Reviewing the Logic*
1100 – 1215	***Fishbone (Ishikawa) Diagrams*** *Cause-and-Effect Analysis • Grouping Causes: Man, Machine, Method, Material, Environment • Brainstorming with Cross-Functional Teams • Using Fishbone for Complex Events*
1215 – 1230	*Break*
1230 – 1330	***Fault Tree Analysis (FTA)*** *Logic Gate Structure (AND/OR Events) • Constructing and Interpreting Trees • Quantitative versus Qualitative FTA • Software Tools and Limitations*
1330 - 1420	***Human & Organizational Factors Analysis*** *Organizational Culture, Workload, Supervision • Training Adequacy and Competency Gaps • Procedures, Communication, and Accountability • Psychological Safety and Behavioral Analysis*
1420 – 1430	***Recap*** *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 Three*

Day 4

0730 – 0830	***Hierarchy of Controls for Corrective Actions*** *Elimination and Substitution • Engineering and Administrative Controls • PPE as the Last Line of Defense • Control Effectiveness and Residual Risk*
0830 – 0930	***Developing SMART Recommendations*** *Specific, Measurable, Achievable, Relevant, Time-Bound • Assigning Ownership and Resources • Realistic Timelines and Follow-Up Plans • Control Implementation Checklists*
0930 – 0945	*Break*
0945 – 1100	***Writing the Investigation Report*** *Report Structure and Executive Summary • Including Evidence, Analysis, Findings • Photos, Sketches and Supporting Documents • Clear, Factual and Professional Tone*
1100 – 1215	***Communicating Investigation Findings*** *Internal versus and External Communication • Sharing Lessons Learned • Briefings to Management and Workers • Avoiding Blame and Protecting Confidentiality*
1215 – 1230	*Break*
1230 – 1330	***Verification & Follow-Up*** *Tracking Action Item Completion • Reassessing Risk Post-Implementation • Effectiveness Audits • Close-Out Reports and Management Review*
1330 – 1420	***Learning from Incidents Across the Organization*** *Building Organizational Memory • Creating Case Studies and Safety Alerts • Integration with Training and Toolbox Talks • Preventive Action Programs*
1420 – 1430	***Recap*** *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*

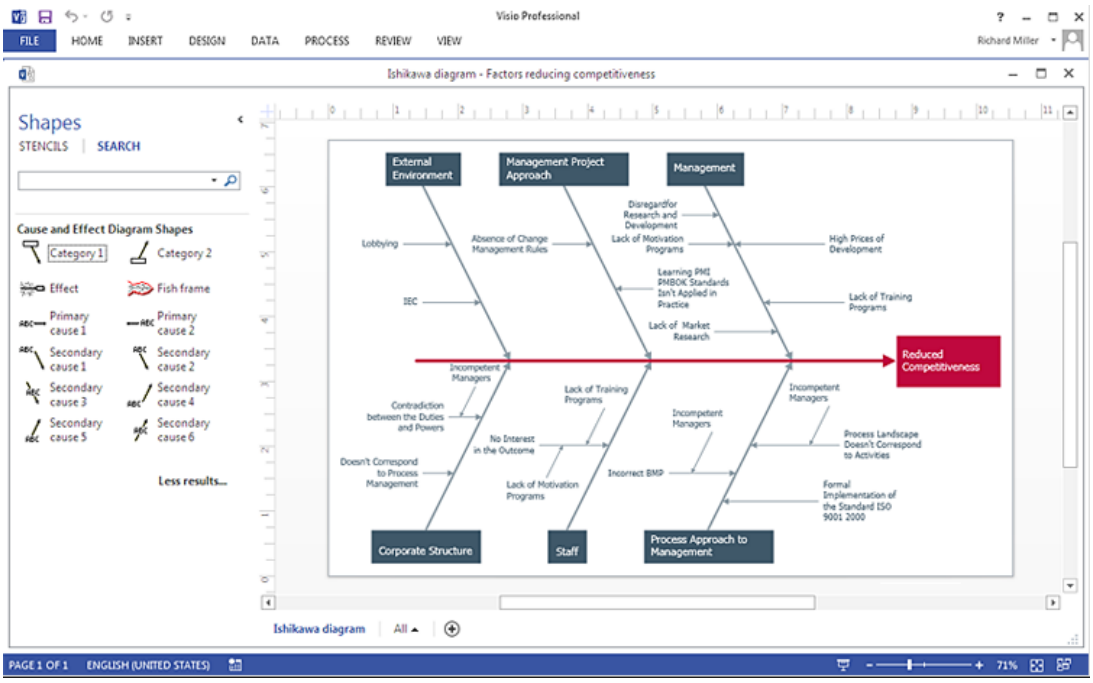
Day 5

0730 – 0830	***Learning from Incidents Across the Organization*** *Building Organizational Memory • Creating Case Studies and Safety Alerts • Integration with Training and Toolbox Talks • Preventive Action Programs*
0830 – 0930	***Workshop: Root Cause Analysis & Reporting*** *Conduct RCA Using 5 Whys and Fishbone • Develop Corrective Actions and Prevention Plan • Draft an Investigation Report • Present Findings and Defend Conclusions*
0930 – 0945	*Break*
0945 – 1100	***Measuring Incident Investigation Effectiveness*** *Investigation KPIs and Lagging/Leading Indicators • Timeliness, Accuracy and Effectiveness Metrics • Management Review Process • Benchmarking and Continual Improvement*
1100 – 1230	***Creating an Incident Investigation Program*** *Roles and Responsibilities in Policy • Templates and Documentation Systems • Training and Competency Development • Auditability and Sustainability of the Program*
1230 – 1245	*Break*

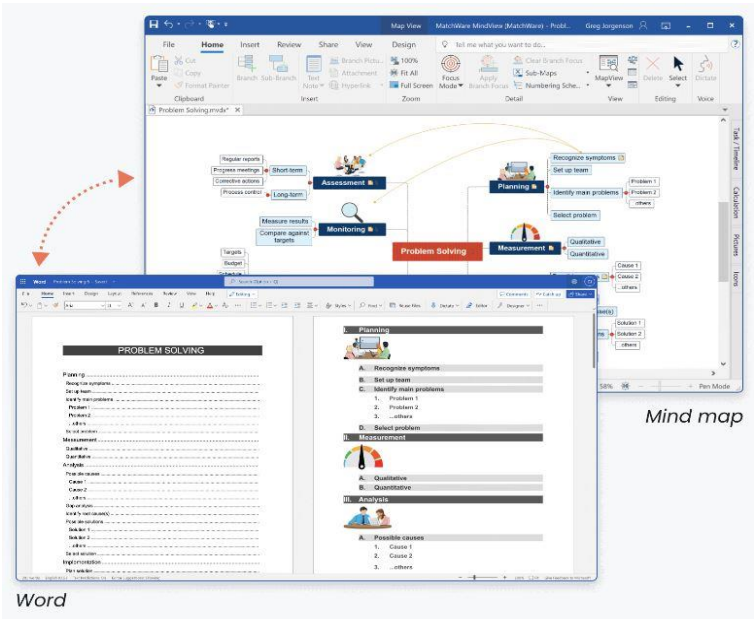
1245 – 1345	***Common Challenges & How to Overcome Them*** *Incomplete Evidence and Biased Reporting • Lack of Cooperation or Fear of Blame • Management Inaction on Recommendations • Investigation Fatigue and Short Memory*
1345 – 1400	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1400 – 1415	***POST-TEST***
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 "Visio" and "Mindview" simulator".



Visio Software



Mindview Software

Course Coordinator
Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org