

COURSE OVERVIEW HE0070 Hazardous Waste Management & Pollution Prevention

CEUS

(30 PDHs) AWARD

Course Title

Hazardous Waste Management & Pollution Prevention

Course Reference

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs

Course Date/Venue



Session(s)	Date	Venue
1	January 28-February 01, 2024	Kizkulesi, Crown Plaza Istanbul Asia Hotels & Convention Center, Istanbul, Turkey
2	February 04-08, 2024	The Mouna Meeting Room, The H Dubai Hotel, Sheikh Zayed Rd - Trade Centre, Dubai, UAE
3	March 03-07, 2024	Oryx Meeting Room, Doubletree By Hilton Doha-Al Sadd, Doha, Qatar

Course Description





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

This course provides an excellent overview of mastering the management of hazardous waste materials as well as preventing contamination of the environment. This knowledge makes participants aware of the regulatory aspects of pollution and the handling of hazardous waste materials within their plants. It also allows them to reduce the amount of hazardous waste produced and save money through preventing personal injury and preventing or limiting the effects of accidental pollution.





At the completion of the course, participants will be able to identify the potential sources of pollution in the workplace; apply systematic techniques for preventing contamination and pollution; operate and employ systematic techniques for handling hazardous waste materials; detect and measure the incidence of contamination; manage hazardous waste materials effectively and efficiently; as well as apply contingency planning and deal with emergencies in a professional manner.

HE0070 - Page 1 of 9





Course Objectives

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

- Manage hazardous waste and prevent contamination of the environment
- Identify the potential sources of pollution in the workplace
- Apply systematic techniques for preventing contamination and pollution
- Operate and employ systematic techniques for handling hazardous waste materials
- Detect and measure the incidence of contamination
- Manage hazardous waste materials effectively and efficiently
- Apply contingency planning and deal with emergencies

Who Should Attend

This course provides an overview of all significant aspects and considerations of hazardous waste and materials for the operations, production, maintenance and HSE departments dealing with hazardous waste and materials management and pollution prevention. Governmental & regulatory authorities, water & sewage treatment departments, municipalities and universities and academic professors and researchers will also benefit from the course.

Accommodation

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

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-ofthe-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 Fee

Istanbul	US\$ 6,000 per Delegate + VAT . This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Dubai	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.
Doha	US\$ 6,000 per Delegate. This rate includes H-STK [®] (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.



HE0070 - Page 2 of 9





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. 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:-







HE0070 - Page 3 of 9





(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.

A	CF	Haward Techi Continuing Profession	nology Middle Eas al Development (HTME-C	Page 1 of 1 CEUS PD) cords
TOR Issuanc HTME No. Participant N	e Date:	24-Aug-17 PAR213887 Tamer Al Hammadi		
Program Ref.	Program	Title	Program Date	No. of Contact Hours CEU's
HE070	Hazardous Pollution Pr	Waste Management & evention	August 20-24, 2017	30 3.0
Total No. of C	CEU's Earned as	s of TOR Issuance Date	-	3.0
				TRUE COPY
Haward Tec	hnology has been 30 Old Meadow Road th the ANSI/IACET 1	approved as an Authorized Provic 1, Suite 500, McLean, VA 22102, US I-2013 Standard which is widely rec o status, Haward Technology is	der by the International Association A. In obtaining this approval, Haw cognized as the standard of good p authorized to offer IACET CEUs	for Continuing Education and Training and Technology has demonstrated that it ractice internationally. As a result of their for programs that qualify under the
(IACE1), 17 complies wit Authorized ANSI/IACET Haward Tecl Education UU IACET is ar internationally	1-2013 Standard. hnology's courses r nits (CEUs) in accord n international author / accepted uniform unit	meet the professional certification lance with the rules & regulations of rity that evaluates programs acco of measurement in qualified courses of c	and continuing education requirem the International Association for Co ording to strict, research-based cri continuing education.	ents for participants seeking Continuing ntinuing Education & Training (IACET). teria and guidelines. The CEU is an









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.

• *** * BAC

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.



HE0070 - Page 5 of 9





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. Raymond Tegman is a **Senior HSE Consultant** with extensive experience within the **Oil & Gas**, **Petrochemical** and **Refinery** industries. His broad expertise widely covers in the areas of **Rigging** Safety Rules, Machinery & Hydraulic **Lifting Equipment**, Handling **Hazardous Chemicals**, Spill Containment, **Fire** Protection, **Fire** Precautions, **Incidents & Accidents** Reporting, **HSEQ** Audits & Inspection, **HSEQ** Procedures, **Environmental** Awareness, **Waste** Management Monitoring, **Emergency Planning**, **Emergency**

Management, Working at Heights, Root Cause Analysis, HSE Rules & Regulations, Process Safety Management (PSM), Process Hazard Analysis (PHA), Techniques, HAZOP, HSE Risk, Pre-Start-up Safety Reviews, HSE Risk Identification, Assessments & Audit, HSE Risk Assessment & Management Concepts, HSE Management Policy & Standards, HSSE Emergency Response & Crisis Management Operations, Confined Space Entry, Quantitative Risk Assessment (QRA), Hazardous Materials & Chemicals Handling, Safety Precaution & Response Action Plan, Hazard & Risk Assessment, Task Risk Assessment (TRA), Incident Command, Accident & Incident Investigation, Emergency Response Procedures, Job Safety Analysis (JSA), Behavioural Based Safety (BBS), Fall Protection, Work Permit & First Aid, Lock-out/Tag-out (LOTO), Emergency Response, Construction Supervision, Scaffolding Inspection, HAZCHEM, Manual Material Handling, Road Traffic Supervision, ISO 9001 and OHSAS 18001.

During his career life, Mr. Tegman has gained his practical and field experience through his various significant positions and dedication as the **Operations Manager**, **Safety & Maintenance Manager**, **Safety Manager**, **Road/Traffic Supervisor**, **Assessor/Moderator**, **Safety Consultant**, **Safety Advisor**, **Safety Officer** and **Liaison Officer** from Zero Harm, SHRA Training & Services (Health & Safety), Road Crete, Balwin Property Development, DEME International, Gladstone Australia, Godavari Gas Pipeline and New Castle NCIG.

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	
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Day	
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 0000	Introduction
0850 - 0900	Course Objectives • Definitions
0000 1000	Basic Concepts
0900 - 1000	Pollution Control Theory • Cleaner Technologies • Pollution Control Techniques
1000 - 1015	Break
1015 1100	Toxicology
1015 - 1100	Basic Toxicology • Case Studies in Environmental Health • Dose – Response
1100 – 1130	Video & Case Study
1120 1215	Toxicology (cont'd)
1150 - 1215	Risk



HE0070 - Page 6 of 9





1015 1015	MSDS
1215 - 1515	MSDS Overview • Reading and using MSDS
1315 – 1330	Break
1220 1400	MSDS (cont'd)
1550 - 1400	Handling Storage • Hazardous Ingredients
1400 – 1420	Video & Case Study
	Recap
1420 1420	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 - 1430	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	MSDS Regulatory Levels
0730 - 0830	Health Based Exposure Levels • Fire and Explosion Labeling
	Hazardous Waste Characterization
0830 - 0930	Hazard Communication Program • Supervisor Duties • Accident Reporting • Waste
	Handling
0930 - 0945	Break
0045 1130	Hazardous Waste Characterization (cont'd)
0945 - 1150	Chemical Safety Awareness • Gasses • Flammable Substances
1120 1220	Hazardous Waste Characterization (cont'd)
1150 - 1250	Fly Ash Management • Handling Substances • Storage of flammable materials
1230 – 1245	Break
1245 – 1420	Video & Case Study
	Recap
1420 1420	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 - 1430	Topics that were Discussed Today and Advise Them of the Topics to be Discussed
	Tomorrow
1430	Lunch & End of Day Two

Dav 3

	Personal Safety
0730 - 0930	Choosing Personal Protective Equipment • Monitoring Hazardous Waste
	Environments • Levels of Safety
0930 - 0945	Break
0945 - 1100	Pollution/Contamination Prevention Procedures
0545 - 1100	Pollution Reduction Zones • Decontamination Procedures • Emergency Procedures
	Contingency Planning
1100 – 1200	Planning for Emergencies • Training of Response Teams • Protective Equipment and
	Clothing
1200 – 1215	Break
1215 – 1330	Video & Case Study
	Contingency Planning (cont'd)
1330 - 1420	Dealing with Spillage • Dealing with release of Hazardous Substances into the
	Atmosphere
	Recap
1120 1120	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 - 1430	Topics that were Discussed Today and Advise Them of the Topics to be Discussed
	Tomorrow
1430	Lunch & End of Day Three



HE0070 - Page 7 of 9





Day 4

0730 0830	Portable Monitoring Equipment
0750 - 0850	Air Displacement Theory • Types of Equipment • PID – How it works
0020 0020	Hazard Identification
0830 - 0930	Steps • HAZOP Studies • Applications • Examples
0930 - 0945	Break
0945 - 1030	Video & Case Study
1020 1200	Waste Minimization
1050 - 1200	Pollution Prevention • Clean Chemistry
1200 – 1215	Break
1015 1015	Process Development
1213 - 1515	Definitions • Examples
1215 1400	Clean Technology
1515 - 1400	Chemistry • Engineering
1400 – 1420	Video & Case Study
	Recap
1420 1430	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 - 1430	Topics that were Discussed Today and Advise Them of the Topics to be Discussed
	Tomorrow
1430	Lunch & End of Day Four

Day 5

0720 0020	Fly Ash Procedures
0730 - 0930	Management • Minimization
0930 - 0945	Break
0045 1120	Chemical Protective Clothing
0945 - 1150	Definition
1120 1220	Chemical Protective Clothing (cont'd)
1150 - 1250	Uses
1230 – 1245	Break
1245 – 1345	COMPETENCY EXAM
	Results, Discussion & Course Conclusion
1345 – 1415	<i>Using this Course Overview, the Instructor(s) will Brief Participants about the</i>
	Course Topics that were Covered During the Course
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course



HE0070 - Page 8 of 9





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 "Industrial Hygiene Virtual Laboratory Simulator" and "CIHprep V9.0 Simulator".



CHprep V9.0
Question Number: 894 Bingineering Controls/Ventilation
A room 50 x 20 x 10 feet contains 100 ppm of CCl ₄ . How much time is required to lower the concentration to 25 ppm if a blower generating 300 cfm is used to clear th room?
A) 46.0 min
B) 11.1 min
D) 54.0 min
You did not answer this question.
The correct answer is: A
$t = \log (C/C_0)(-2.303)(P/Q)$
Substituting we get: t = log (25/100)(-2.303)(10,000 ft ³ /300 cfm) t = 46 min
Where:
P = Room volume C _o = Beginning concentration
C = Ending concentration O = Flow
CiHprep V9.0
Copyright 2010, DataChem Software, Westboro, MA

Course Coordinator

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HE0070 - Page 9 of 9

