

## **COURSE OVERVIEW HE0260** Certified Environmental Impact Assessment Professional (CEIAP)

#### **Course Title**

Certified Environmental Impact Assessment Professional (CEIAP)

#### **Course Date/Venue**

October 07-11, 2024/Al Dhafra Meeting Room, Royal Rose Hotel, Abu Dhabi, UAE

Course Reference

HF0260

Course Duration/Credits WA

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.



Certified Environmental Impact Assessment Professional (CEIAP) is enabled with the knowledge and skills to perform the Environmental Impact Assessment in various projects to assess their different categories of the effects on the environment. EIAP is necessary in each new project started to ensure the environmental balance to be maintained.



Certified Environmental Impact Assessment Professional (CEIAP) possess all capabilities in achieving the desired result by bringing in the world class knowledge, best in class practices to any industry, organization or management paving the way for more environmental protection required for the sustainable practices of the future. The certification assesses the proficiency in environmental laws, regulations and standards, assessment tools and technologies adopted with better scope.

Candidates pursuing for the Certified Environmental Impact Assessment Professional (CEIAP) examination have to pass with 50% a 2-hour examination comprising multiple choice questions understanding of the subject.



















This course is designed to provide participants with a detailed and up-to-date overview of environmental impact assessment. It covers the major environmental, resource problems and major environmental challenges; the global perspectives, the state of the environment, policy responses and the major existing and emerging environmental issues scope survey; the population growth and environmental resistance, depletion of natural resources, environmental problems, soil erosion and soil degradation; the threat to biodiversity, minerals depletion, fossil fuel depletion, pollution of the environment, emissions to air and the impact of acid deposition; the environmental impact assessment and the types of environmental impacts; managing the EIA process; evaluating and assessing the significant environmental impacts; and the mitigating measures and environmental impact statement (EIS).

During this interactive course, participants will learn the post-decision monitoring and auditing; the methods of EIA and the tools for screening and preliminary assessments; the impact identification methods; the main advantages and disadvantages of impact identification methods; the impact prediction methods and the key elements for assessing impact significance; the impact significance criteria, ecological significance criteria and social significance criteria; the alternative approaches to determine significance practical guidance; the environmental risk assessment; the hazards and consequences; estimating, assessing, managing and monitoring the risk; the ISO 14000 and 14040; the environmental pollution control, pollution prevention and waste minimization; the life-cycle assessment and its conceptual framework; and the global concerns and responses.

#### **Course Objectives**

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

- Get certified as a "Certified Environmental Impact Assessment Professional (CEIAP)"
- Discuss the environmental impact assessment including the major environmental, resource problems and major environmental challenges
- Explain the global perspectives, the state of the environment, policy responses and the major existing and emerging environmental issues scope survey
- Identify population growth and environmental resistance, depletion of natural resources, environmental problems, soil erosion and soil degradation
- Recognize the threat to biodiversity, minerals depletion, fossil fuel depletion, pollution of the environment, emissions to air and the impact of acid deposition
- Carryout environmental impact assessment and identify the types of environmental impacts
- Manage the EIA process, evaluate and assess the significant environmental impacts and identify mitigating measures
- Review of the environmental impact statement (EIS) and apply post-decision monitoring and auditing
- Classify the methods of EIA and apply the tools for screening and preliminary assessments
- Employ impact identification methods and explain the main advantages and disadvantages of impact identification methods
- Carryout impact prediction methods and identify the key elements for assessing impact significance

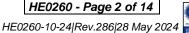




















- Review impact significance criteria, ecological significance criteria and social significance criteria
- Perform alternative approaches to determine significance practical guidance
- Apply environmental risk assessment, identify the hazards and consequences and estimate, assess, manage and monitor the risk
- Discuss ISO 14000 and 14040 as well as apply environmental pollution control, pollution prevention and waste minimization
- Illustrate life-cycle assessment and describe its conceptual framework as well as review global concerns and responses

## **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, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.

#### **Who Should Attend**

This course provides an overview of all significant and considerations of environmental impact and life cycle assessments in accordance with the international standards for environmental and HSE professionals such as managers, engineers, superintendents, supervisors and officers. Further, the course is also suitable to those who wish to develop a good understanding of the evaluation of environmental aspects and impacts and how life-cycle assessments can be used to generate useful information for the organization, begin to study of design for environment requirements, contribute to the development of environmental objectives and targets and responsible for setting up environmental management systems and developing preparatory environmental reviews.

#### **Exam Eligibility & Structure**

Exam Candidates shall have the following minimum prerequisites:-

Certified Environmental Impact Assessment Professional (CEIAP) requires a minimum of 2 years of experience in Environmental industry or minimum of 5 years of experience in Environmental related industry. Proof of employment has to be submitted.

The candidates are obliged to renew their certification every 5 years, pertaining to conform to the current techniques, methodologies and practices. This will give them more leverage to be updated and sustain in the industry of their operation.

#### **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.

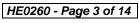


















## Course Certificate(s)

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 Environmental Impact Assessment Professional (CEIAP)". 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.



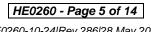






















#### **Certificates Accreditations**

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.

## Course Fee

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

#### Accommodation

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

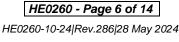




















### Course Instructor(s)

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:



**Dr. John Petrus**, PhD, MSc, BSc, is a **Senior HSE Consultant** with over **30** years of **onshore & offshore** experience within the **Oil & Gas**, **Refinery** and **Petroleum** industries. His wide experience covers in the areas of **HAZOP & HAZID**, **HAZMAT & HAZCOM** Storage & Disposal, As Low as Reasonably Practicable (**ALARP**), **Environmental** Impact Assessment Professional, **Environmental** & Waste Management, Environmental Monitoring and Modelling, **Environmental** Impact Assessment (**EIA**), **Environmental** Emergency Plan, Process Hazard Analysis (**PHA**), Process Safety Management (**PSM**), **Hazardous Materials & Chemicals** Handling, **Pollution** 

Control, Environment, Health & Safety Management, Process Risk Analysis, Effective Tool Box Talks, Construction Sites Safety, HSSE Management System, HSSE Audit & Inspection, HSEQ Procedures, Authorized Gas Testing, Confined Space Entry & Rescue, Risk Management, Quantitative & Qualitative Risk Assessment, Working at Height, Firefighting Techniques, Fire & Gas Detection System, Fire Fighter & Fire Rescue, Fire Risk Assessment, HSE Industrial Practices, Manual Handling, Rigging Safety Rules, Machinery & Hydraulic Lifting Equipment, Warehouse Incidents & Accidents Reporting, Incident & Accident Investigation, Emergency Planning, Emergency Response & Crisis Management Operations, Waste Management Monitoring, Incident Command, Job Safety Analysis (JSA), Behavioral Based Safety (BBS). Further he is also well versed in Materials for Construction & Repair of Concrete, Concrete Structures & Building Rehabilitation, Reinforced Concrete Structures Protection, Building Construction Technology, Construction Operations & Civil Engineering Services, Building Management, Building Maintenance, Construction & Concrete Works, Construction Management, Construction Materials & Testing, Construction Safety, Predictive Maintenance in Construction, Construction & Facilities Development, Buildings & Diverse Plant Infrastructure, Planning & Monitoring the Progress & Quality of Work, Physical Planning & Operations, Rotating Machinery Principles & Applications, Rotating Equipment Selection, Operation, Maintenance, Inspection & Troubleshooting, Rotating Machine/Equipment in Industry, Control Valves & Actuators, Data Analytics for Managerial Decision Making, Business Process Analysis, Mapping & Modeling, Research Methods & Analysis, Statistical Data Needs Analysis, Oil & Gas Industry Business Environment & Competitive Intelligence Gathering & Analysis, Petroleum Economics & Risk Analysis, Certified Data Analysis.

During his career life, Dr. Petrus held significant positions and dedication as the Executive Director, Senior Geoscience Advisor, Exploration Manager, Project Manager, Manager, HSE Engineer, Mechanical Engineer, Maintenance Engineer, Chief Geologist, Chief of Exploration, Chief of Geoscience, Senior Geosciences Engineer, Senior Explorationist, Senior Geologist, Geologist, Senior Geoscientist, Geomodeller, Geoscientist, CPR Editor, Resources Auditor, Project Leader, Technical Leader, Safety Supervisor, Team Leader, Senior HSE Consultant, Scientific Researcher and Senior Instructor/Trainer from various international companies and universities such as the Dragon Oil Holding Plc., ENOC, MENA, ENI Group of Companies, Ocre Geoscience Services (OGS), Burren RPL, Ministry of Oil-Iraq, Eni Corporate University, Standford University, European Universities, European Research Institutes, NorskHydro Oil Company, Oil E&P Companies, just to name a few.

Dr. Petrus has a **PhD** in **Geology** and **Tectonophysics** and **Master** and **Bachelor** degrees in **Earth Sciences** from the **Utrecht University**, **The Netherlands**. Further, he is a **Certified Instructor/Trainer**, a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management** (**ILM**), a Secretary and Treasurer of Board of Directors of Multicultural Centre, Association Steunfonds SSH/SSR and Founding Member of Sfera Association. He has further published several scientific publications, journals, research papers and books and delivered numerous trainings, workshops, courses, seminars and conferences internationally.





















## 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: Monday, 07th of October 2024

Day 1:	Monday, 07 <sup>th</sup> of October 2024
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	General Environmental Outlook Responsible Approach • Environment Definition • Background to Global Environmental Outlook • Population Growth • Throw-away Society • Changing Character of Natural Resource Challenges in the Last 25 Years • Major Environmental & Resource Problems • Resource Problems • Dependence on the Environment • Environment at Risk: Some Snapshots • Major Environmental Challenges • Major Environmental Challenges of the 21st Century • Global Perspectives • Global Perspectives - Social Drivers • Global Perspectives - Developed World-Travel
0930 - 0945	Break
0945 – 1100	General Environmental Outlook (cont'd) Global Perspectives - Economic Drivers • Global Perspectives - Political Drivers • Global Perspectives - Demographic Drivers • Growth in World Population • Global Perspectives - Environmental Issues • The State of the Environment - Global Overview • Global CO2 Emissions • The State of the Environment - Global Overview • The State of the Environment - Global Overview - Nitrogen Loading • The State of the Environment - Global Overview - Chemical Risks • The State of the Environment - Global Overview - El Niño • The State of the Environment - Global Overview - Freshwater • The State of the Environment - Global Overview - Atmosphere
1100 – 1215	General Environmental Outlook (cont'd)  The State of the Environment - Global Overview - Urban Areas • The State of the Environment: Regional Trends • Man Made Forest Fires in Vietnam • Forest Fire in Indonesia • The State of the Environment - Europe and Central Asia • The State of the Environment - North America • Annual Per Capita CO2 Emissions (Tonnes) • The State of the Environment - West Asia • The State of the Environment - Polar Regions • Boreal Forest Damage in North-east Russia • Pine Glacier, Antarctica • Policy Responses - Global Action • Policy Responses - Multilateral Environmental Agreements • Regional Policy Responses - Asia and the Pacific
1215 – 1230	Break
1230 – 1330	General Environmental Outlook (cont'd) Regional Policy Responses - Europe and Central Asia • Regional Policy Responses - Latin America/Caribbean • Regional Policy Responses - North America • Regional Policy Responses - West Asia • Regional Policy Responses - The Polar Regions • Environment Oil & Gas Sector Concerns • Reasons for Oil & Gas Problems • Recent Management Responses • Recent Institutional Responses • Oil & Gas - UNEP's Objective • Future Perspectives • Major Existing & Emerging Environmental Issues SCOPE Survey • Outlook • UNEP Recommendations • Overall conclusions from GEO 2000



















1330 – 1420	Man & the Environment  Carrying Capacity • Population Growth & Environmental Resistance • Exponential Population Growth & the Carrying Capacity • Depletion of Natural Resources • Categories & Examples of Natural Resources • Depletion of Natural Resources (Renewable Resources, Non-renewable Resources, Perpetual Resources) • Environmental Problems • Soil Erosion • Soil Erosion – Examples • Soil Degradation in Africa • Loss of Biodiversity • Threat to Biodiversity in Latin America • Threat to Biodiversity – Example • Fresh Water Scarcity • Over-Abstraction of Water • Minerals Depletion • Fossil Fuel Depletion
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:	Tuesday, 08th of October 2024
	Man & the Environment (cont'd)
	Fossil Fuel Consumption in North America • Pollution of the Environment •
	Emissions to Air - Photochemical Smog • Temperature Inversion • Summertime
	Smog in Western Europe • Emissions to Air - Acid Deposition • pH Scale •
0730 - 0930	Emissions to Air Acid Deposition: Impacts • Acid Deposition – Tree kill • The Impact
0730 - 0330	of Acid Deposition in North America • Discharges to Water - Nutrient Loading •
	Discharges to Water – Nutrient Loading: Eutrophication • Discharges to Water – Oil
	Pollution • Oil Pollution in the Arctic Circle • Contamination of Land - Hazardous
	Waste Disposal • Contamination of Land – Industrial Heavy Metals • Heavy Metal
	Contamination in Europe & Central Asia
0930 - 0945	Break
	Environmental Impact Assessment
	Introduction - Environmental Impact Assessment • The 'Impact Analysis' or
	Detailed Study Phase of EIA Involves • Types of Environmental Impacts • Direct vs.
	Indirect Impacts • With Credit To Scott Adams • Short- and Long-Term Impacts •
0945 - 1030	Irreversible Environmental Changes • The Term 'Environment' Includes •
0943 - 1030	Environmental Impact Assessment - Decision-Making Tool • Environmental Impact
	Assessment - Sustainable Development • Environmental Impact Assessment -
	Strategic Planning • Strategic Environmental Assessment and Environmental
	Impact Assessment • Environmental Impact Assessment - Development Control •
	Environmental Impact Assessment - Financial Assistance
	Environmental Impact Assessment (cont'd)
	Environmental Impact Assessment - Overseas Development & the Rio Declaration •
	Development & Worldwide Take-up of EIA • Overview of the EIA Process • Legal
	Consideration Example: Norwegian petroleum policy • Measures: Environmental
1030 - 1130	Impact Assessments • EIA Stages • EIA - Elements of Mitigation • The
	Environmental Impact Assessment Study for Lofoten/ the Barents Sea • Specific
	Measures In Vulnerable Areas • Measures: Discharge Permits • Measures: Zero
	Discharge Philosophy • Measures: CO2-tax • Measures: Co-operation with the
	Industry • Stages of an EIA • Managing the EIA Process
1130 - 1145	Break



















1145 – 1230	Environmental Impact Assessment (cont'd)
	Screening of the Project •Scoping of the EIA • Description of the Development
	Project • Description of the Environmental Baseline • Identification of Key
	Environmental Impacts • Predication of Environmental Impacts • Evaluation &
	Assessment of Significant Environmental Impacts • Identification of Mitigating
	Measures • Public Consultation & Participation • Presentation of the Findings in the
	EIS • Presentation of the Findings in the EIS Photo - Impression • Review of the
	Environmental Impact Statement (EIS) • Decision-Making • Post-Decision
	Monitoring & Auditing • International Organisations & EIA
	Environmental Impact Assessment (cont'd)
	The UN Econ Commissions Europe & Asia and Pacific • The Economic and Social
	Commission for Asia and the Pacific • The European Union • The Organization for
1230 – 1315	Economic Cooperation and Development (OECD) • The World Bank • The Asian
	Development Bank • Which of the Following Projects May Require an EIA? • Power
	Lines • Small Hotel • Housing Scheme • Wind Farm • Nuclear Power Station, Japan
	• Road Building Malawi • Pipeline
1315 - 1420	Environmental Impact Assessment Methods
	History • Its Philosophy • The Legislation - NEPA (USA,1971)
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: Wednesday, 09th of October 2024

Day 3.	Wednesday, 09" of October 2024
0730 - 0900	Environmental Impact Assessment Methods (cont'd)
	The Legislation - EIA (85/337/EEC) • The Procedure
0900 - 0915	Break
	Classification of Methods
	Tools for Screening and Preliminary Assessments • Checklists • Example of Checklist
	• Checklists: Pros & Cons • Interaction Matrices • Example of Matrix • Example of a
0915 - 1030	Leopold Matrix • Matrices Pros & Cons • Network Analyses • Network Pros & Cons
0313 - 1030	• Map Overlays • Overlays • Overlays: Pros & Cons • Choosing Tools • Impact
	Identification Methods • Main Advantages and Disadvantages of Impact
	Identification Methods • Information Required To Establish Baseline Conditions • An
	Environmental Impact • Impact Characteristic Summary Table
	Classification of Methods (cont'd)
	Methods of Impact Prediction • Types of Uncertainty in Impact Prediction • Types of
	Social Impact • Health Impacts • Factors Affecting Economic Impacts • Factors
	Affecting Fiscal Impacts • Key Elements for Assessing Impact Significance •
1030 – 1145	Guiding Principles for Determining Impact Significance • Test for Significance by
	Asking Three Questions • Impact Significance Criteria • Ecological Significance
	Criteria • Ecological Significance Criteria • Social Significance Criteria •
	Environmental Standards • Alternative Approaches to Determine Significance •
	Practical Guidance





















1145 – 1245	Environmental Risk Assessment
	Terms & Definitions • Environmental Assessment (EA) Process • Example Risk
	Assessment Matrix • Sample Risk Assessment Output • Types of Risk Assessment -
	Hierarchy of Risk Assessment (Qualitative, Semi-quantitative, Quantitative) • The
	Nature of Environmental Risks • The Precautionary Principle • Reason for
	Undertaking Environmental Risk Assessment • Reason for Undertaking ERA -
	Environmental Laws & Standards • Reason for Undertaking ERA - Corporate Risk &
	Liability Management • Step by Step Approach to Environmental Risk Assessment •
	Steps in the Risk Assessment Process • Defining the Objectives
1245 - 1300	Break
	Environmental Risk Assessment (cont'd)
	Defining the Scope • Describing the Activity • Identifying the Hazards • Hazard
1300 – 1420	Classification & Control • Identifying the Consequences • Estimating the Magnitude
	of the Consequences • Ranking the Magnitude of Consequences for Plant & Animal
	Species • Estimating the Probability of the Consequences • Estimating the Risk •
	Examples of Risk Matrices • Basis • Factors to Consider
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:	Thursday, 10 <sup>th</sup> of October 2024
0730 - 0830	Environmental Risk Assessment (cont'd) Risk Assessment Example • Evaluating the Risk • Fault Tree Analysis • Greenpeace Inflatable at Brent Spar with Water Canon being Used to Prevent Boarding • Assessing the Risk • Example of a Risk Assessment Table • Example of a Risk
	Assessment Criteria Matrix (ALARP*) • Managing the Risk • The Risk Management Hierarchy • Monitoring the Risk • Case Studies: Environmental Incidents & Accidents • Concluding Comments
0830 - 0930	ISO 14000 & 14040 ISO Structure (Demming Cycle) • ISO 14001 Elements • 17 Requirements in ISO 14001 • Environmental Auditing & the ISO Series • ISO 14000 Standards • ISO 14000 in Perspective • What the ISO 14000 Series Cover • Understanding ISO 14001: 2004 • Section Outcome • Why is ISO 14001 Important? • Why Environmental Management? • ISO 14001 EMS Structure • Scope, References, Terms and Conditions
0930 - 0945	Break
0945 - 1045	ISO 14000 & 14040 (cont'd)  Scope Enables • Terms and Definitions • PDCA (Plan, Do, Check and Act) Model as Part of the Environmental Management System (EMS) • PDCA Model for 14001:2004 • Environmental Management System • Environmental Management System Requirements • Environmental Management System Requirements consists of • General Requirements • Environmental Policy • Planning • Environmental Aspects and Impacts - Definitions • Planning Environment Aspects • Significance
1045 - 1145	ISO 14000 & 14040 (cont'd)  How to Identify Significance by using Logic Gates • Criteria for Assessment of Environmental Impacts • Life Cycle Assessment (14040) • Legal and Other Requirements • Objectives, Targets and Programmes • Implementation and Operation • Structure and Responsibility • Training, Awareness and Competence • Communication • Documentation • Examples of Documents • Control of Documents • Operational Control



















1145 – 1200	Break
1200 – 1300	ISO 14000 & 14040 (cont'd)  Emergency Preparedness and Response • Checking • Monitoring and Measurement •  Evaluation of Compliance • Non-conformity, Corrective Action and Preventive Action • Control of Records • Internal Audit • Management Review • Input to management review shall include • Outputs from management review shall include • Common Elements - OHSAS 18001, ISO 14001, ISO 9001 • Case Study Gulf Of Mexico
1300 – 1420	Environmental Pollution Control Aims and Objectives of Session • Pollution Prevention • Process Design for Pollution Prevention • Waste Minimization • Environmental Management Hierarchy • P2 Arrow Diagram • Emission Examples • P2 Targets • What is NOT Waste Reduction? • Basic Assessment Flow Diagram • Materials Balance • Describe the Waste
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

Friday, 11th of October 2024 **Day 5:** 

Day 5.	Friday, 11 Of October 2024
0730 - 0930	Life-Cycle Assessment (14040)  The Life-Cycle Concept • Life-Cycle Assessment • LCA Conceptual Framework - SETAC Definition • ISO 14040 Definition of LCA • General Scope of LCA • LCAs in the modern world — ISO 14040 • Importance of LCA • Limitations of LCA • Pros and Cons for LCA Within the Company • Spectrum of LCA • Focus of LCAs • Facility-Based Life-Cycle Thinking • Application to Performance Track
0930 - 0945	Break
0945 – 1215	Life-Cycle Assessment (14040) (cont'd)  LCA Steps • LCA In Practice • LCA Application • Life Cycle Analysis • LCA Simplified • LCA Example • Boustead Model in LCA • What is the Boustead Model?  • Assigning Life Cycle Inventory Results to Environmental Impact Categories • A Company Evaluation Report LCA • Life Cycle Risk Management • ISO 14040: Example of a product system for LCA • Success Factors of LCA
1215 – 1300	Global Concerns & Responses Global Concerns • Environmental Challenges • Global Concerns - Global Warming - The Natural Greenhouse Effect vs. Human Enhanced Greenhouse Effect • Global Concerns - Global Warming • Predicated Sea Level Rise of 0.5m - Europe and Mediterranean Basin • Global Concerns - Stratospheric Ozone Depletion • Creation of the Ozone Hole over Antarctica • Antarctic Ozone Hole • Waste by Sector in U.S.
1300 - 1315	Course Conclusion Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course
1315 - 1415	COMPETENCY EXAM
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course





















#### Simulators (Hands-on Practical Sessions)

Practical sessions 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 our state-of-the-art "AERSCREEN Model" and the Environmental simulators "CAMEO Chemicals Suite Software" and "US EPA SCREEN3 Model".



### **AERSCREEN Model**



#### **CAMEO Chemicals Suite Software**























**US EPA SCREEN3 Model** 

# **Course Coordinator**

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