

# ROOT CAUSE ANALYSIS

Discover and avoid failure using the best adopted incident investigation & analysis techniques!

10<sup>th</sup> - 13<sup>th</sup> June 2025 at Kuala Lumpur, Malaysia | 16<sup>th</sup> - 19<sup>th</sup> June 2025 at Bandung, Indonesia  
19<sup>th</sup> - 22<sup>nd</sup> August 2025 at Kuala Lumpur, Malaysia | 25<sup>th</sup> - 28<sup>th</sup> August 2025 at Bandung, Indonesia  
22<sup>nd</sup> - 25<sup>th</sup> September 2025 at Bangkok, Thailand | 04<sup>th</sup> - 07<sup>th</sup> November 2025 at Kuala Lumpur, Malaysia  
10<sup>th</sup> - 13<sup>th</sup> November 2025 at Bali, Indonesia



**Petrosync Lecturer**

**Akhtar Quddus**

Managing Director  
MaxTrain International

Case Studies,  
Discussion, and many  
Practical exercises!

- ▶ Having over 30 years of experience providing consulting & training services in occupational Safety to various clients in Pakistan, Saudi Arabia, UAE, Oman, Jordan, Azerbaijan, S. Korea, Malaysia, India.
- ▶ Trained, Evaluated and Certified over 25,000 Safety Critical Personnel
- ▶ NEBOSH (UK) International General Certificate approved trainer
- ▶ NEBOSH (UK) International Technical Certificate for Oil & Gas Safety approved trainer
- ▶ IOSH (UK) Managing Safely & Working Safely licensed trainer
- ▶ CIEH (UK) Level 4 H&S in the Workplace licensed trainer
- ▶ CIEH (UK) Risk Assessment Principles & Practice licensed trainer
- ▶ CIEH (UK) Principles of COSHH licensed trainer
- ▶ OHSAS 18001 Lead Auditor

## TESTIMONIALS

'Demonstrates a strong ability to identify, analyze and recommend possible solutions based on complex data analysis.'

'A professional trainer with excellent experience in his field possessing all skills and knowledge which assisted him to present his training sessions with integrity and professionalism.'

'I found him very composed, audience oriented, technical strength, rich in experience, well prepared and in a nutshell, I can call him a good trainer.'

'Displays a strong knowledge of customer's business.'

'A competent trainer with excellent humane values display for adequate communications and ensuring the message through the trainees mind, finally in attitude.'

## Root Cause Analysis

10<sup>th</sup> - 13<sup>th</sup> June 2025 at Kuala Lumpur, Malaysia | 16<sup>th</sup> - 19<sup>th</sup> June 2025 at Bandung, Indonesia  
 19<sup>th</sup> - 22<sup>nd</sup> August 2025 at Kuala Lumpur, Malaysia | 25<sup>th</sup> - 28<sup>th</sup> August 2025 at Bandung, Indonesia  
 22<sup>nd</sup> - 25<sup>th</sup> September 2025 at Bangkok, Thailand | 04<sup>th</sup> - 07<sup>th</sup> November 2025 at Kuala Lumpur, Malaysia  
 10<sup>th</sup> - 13<sup>th</sup> November 2025 at Bali, Indonesia

### Course Introduction

Most organizations have accident investigation procedures. However, these procedures are often based on a blame culture & do not inspire the investigator to find & correct the defects in the management system (root causes) that allowed the hazards to exist & the accident to occur.

Several industries have adopted excellent accident investigation & analysis techniques. Competence in the application of modern accident/incident investigation tools will assist organizations to learn & to prevent the recurrence of accidents & to evaluate the extent & location of management defects (root-causes), which contributed to the accident event. A good analytical accident investigation is invaluable to achieve continuous improvement in an organization's HSE performance.

### Course Objectives

- ▶ Define the accident / incident event
- ▶ Understand modern accident causation theories
- ▶ Define all accident investigation and analysis stages
- ▶ Carry out Initial actions in response to accident and incidents
- ▶ Gather evidence and data relevant to the accident investigation
- ▶ Interview witnesses
- ▶ Analyze the role of human factors involvement in accident investigation
- ▶ Compile accident reports and remedial action plans
- ▶ Gain familiarity with modern accident analysis techniques
- ▶ The use of accident investigations as a management audit tool
- ▶ To locate and define active human error, preconditions and root causes
- ▶ Report writing and compilation

### Training Methodology

The workshop is designed as a highly interactive & engrossing session comprising :

- ▶ video-based case studies
- ▶ syndicate exercises
- ▶ role plays
- ▶ group discussions
- ▶ power point presentations

### Specially Designed for

This workshop is intended for all staff roles in engineering, technical and supporting departments with responsibility for ensuring safety in the workplace and for conducting, leading, reviewing and approving incident investigations.

## PROGRAM SCHEDULE

08:00	Registration (Day1)
08:10 – 10:00	Session I
10:00 – 10:15	1 <sup>st</sup> Tea Break
10:15 – 12:30	Session II
12:30 – 13:30	Lunch Break
13:30 – 15:00	Session III
15:00 – 15:15	2 <sup>nd</sup> Tea Break
15:15 – 16:00	Session IV
16:00	End of Day

*\*Schedule may vary for each training*

# Root Cause Analysis

10<sup>th</sup> - 13<sup>th</sup> June 2025 at Kuala Lumpur, Malaysia | 16<sup>th</sup> - 19<sup>th</sup> June 2025 at Bandung, Indonesia  
 19<sup>th</sup> - 22<sup>nd</sup> August 2025 at Kuala Lumpur, Malaysia | 25<sup>th</sup> - 28<sup>th</sup> August 2025 at Bandung, Indonesia  
 22<sup>nd</sup> - 25<sup>th</sup> September 2025 at Bangkok, Thailand | 04<sup>th</sup> - 07<sup>th</sup> November 2025 at Kuala Lumpur, Malaysia  
 10<sup>th</sup> - 13<sup>th</sup> November 2025 at Bali, Indonesia

## Course Agenda

### Day 1

- Introductions, Expectations & Anticipations
- Defining Incidents, Accidents, Near Misses, Dangerous Occurrences
- Categorizing of Incidents according to nature & severity
- Complying with the Legal Requirements for reporting & investigating accidents
- Adopting Accident Prevention strategy through Risk Management
- Understanding how accidents are caused
- The process & system view of accidents & accident investigations
- The need for & benefits of Root Cause Analysis
- Understanding Immediate, Underlying & Root causes & Causal Factors
- The four stages of an Investigation Process
- **Case Study & Group Activity**

### Day 2

- Configuration & Levels of the investigation team
- Immediate response in case of an accident
- Emergency procedures, Crisis handling & loss minimization
- Taking control of the scene (Immediate Response)
- Video-based Case Study & Group discussions
- The various sources & categories of evidence
- Collecting & Preserving Evidence
- Common Pitfalls in observations
- Effective practical interviewing tips & techniques
- **Role Play Group Exercises**

### Day 3

- Sifting and sorting evidence & information
- Incident Timeline – Data Mapping
- Understanding the problems using Building blocks
- Identifying critical factors
- Analyzing evidence & information
- Identifying immediate causes, root causes and system causes
- Using CLC Charts for analysis
- Using 5-Why & Fish-bone techniques to re-enforce CLC Analysis
- **Case Study & Group exercises**

### Day 4

- Identifying human factors & Understanding Human Errors
- Modifying & influencing behaviors
- **Case Study & Group exercise**
- Corrective Measures, Recommendations
- An Overview of Root Cause Elimination
- Understanding & applying the Hierarchy & symmetry of controls
- Addressing the personal, job & organizational factors in the recommendations
- Overview of Solution Implementation
- Developing an Implementation Plan & organizing for its Implementation
- Report Writing
- Action Tracking & Closure monitoring
- Trend Analysis

## Petrosync Quality

**Limited Attendees**  
 The course has limited seats to ensure maximum learning and experience for all delegates.

**Certificate of Attendance**  
 You will receive a Certificate of Attendance bearing the signatures of the Trainer upon successful completion of the course. This certificate is proof of your continuing professional development.

**Interactive Training**  
 You will be attending training designed to share both the latest knowledge and practical experience through interactive sessions. This will provide you with a deeper and more long-term understanding of your current issues.

**High Quality Course Materials**  
 Printed course manual will provide you with working materials throughout the course and will be an invaluable source of reference for you and your colleagues afterward. You can follow course progress on your laptop with soft copies provided.

## IN-HOUSE SOLUTIONS

**SAVE COST • IMPROVE PERFORMANCE • REDUCE RISK**

PetroSync understands that in current economic climate, getting an excellent return on your training investment is critical for all our clients. This excellent training can be conducted exclusively for your organization. The training can be tailored to meet your specific needs at your preferred location and time. We will meet you anywhere around the globe.

If you like to know more about this excellent program, please contact on +65 3159 0800 or email [general@petrosync.com](mailto:general@petrosync.com)

## Root Cause Analysis

10<sup>th</sup> - 13<sup>th</sup> June 2025 at Kuala Lumpur, Malaysia | 16<sup>th</sup> - 19<sup>th</sup> June 2025 at Bandung, Indonesia  
 19<sup>th</sup> - 22<sup>nd</sup> August 2025 at Kuala Lumpur, Malaysia | 25<sup>th</sup> - 28<sup>th</sup> August 2025 at Bandung, Indonesia  
 22<sup>nd</sup> - 25<sup>th</sup> September 2025 at Bangkok, Thailand | 04<sup>th</sup> - 07<sup>th</sup> November 2025 at Kuala Lumpur, Malaysia  
 10<sup>th</sup> - 13<sup>th</sup> November 2025 at Bali, Indonesia



### Petrosync Lecturer

**Akhtar Quddus**

Managing Director

MaxTrain International

Akhtar Quddus, is a Senior Safety Consultant and Master Creative Trainer with over 30 years of professional experience. He has worked with oil & gas, chemical & petrochemical, fertilizer, engineering, construction, transportation & heavy cargo lifting & haulage companies in Pakistan, Saudi Arabia, Jordan, UAE, Oman, Malaysia, Singapore, Azerbaijan, South Korea, and India. He has trained, evaluated and certified over 25,000 Safety Critical Personnel for BP Pakistan, OMV, BHP, ENI, MOL, Schlumberger, Krakow, Deutag, JSL, DESCON, Siemens, KESC, etc. and other clients including Control of Work Standard, Incident Investigation Team Leaders, Permit to Work Authorized Persons, Energy Isolation Authorities, Confined Space Supervisors, Crane Operators and Riggers, Rigging Supervisors, Scaffolding Supervisors, Scaffolding Inspectors, etc.

### Certification

- NEBOSH (UK) International General Certificate approved trainer
- NEBOSH (UK) International Technical Certificate for Oil & Gas Safety approved trainer
- IOSH (UK) Managing Safely & Working Safely licensed trainer
- CIEH (UK) Level 4 H&S in the Workplace licensed trainer
- CIEH (UK) Risk Assessment Principles & Practice licensed trainer
- CIEH (UK) Principles of COSHH licensed trainer
- OHSAS 18001 Lead Auditor

### Project Experience

- Developed Control of Work Standard procedures for BP Pakistan E&P Inc. in the areas of Permit to Work, Energy Isolations, Incident Investigation & Root Cause Analysis, ABC Analysis, Confined Space Entry, Work at Heights & Fall Protection, Scaffolding, Lifting Operations, Lifting Risk Assessment, Excavations & Trenching, Management of Change, Driving / Vehicle Safety, Business Continuity Planning, Contractor Safety Management System, Hazard Identification, Risk Assessment and Risk Control (HIRARC), HSE Risk Matrices and Risk Registers, etc.
- Conducted incident investigations for high impact incidents at Sui Northern Gas Pipelines Ltd.
- Conducted HAZOP Studies for SABIC, Saudi Aramco & SWCC Plants in Saudi Arabia.
- Conducted Fire Risk Assessments for BP Pakistan, BOC Gases Ltd.
- Developed & implemented Behavior Based Safety programs, implementation & audits for NOMAC.
- Conducted HSE Management systems (OHSAS 18001 & ISO-14001) Audits & Gap analysis.
- Conducted HSE Climate Surveys and Trending.

### Partial Client List

- |                |   |
|----------------|---|
| ● BP Pakistan  | ● British Petroleum                               |
| ● OMV          | ● BOC Gases                                       |
| ● BHP          | ● SOGEX   |
| ● ENI          | ● Oman  |
| ● MOL          | ● SWCC  |
| ● Schlumberger | ● Sui Northern Gas Pipelines Ltd.                 |
| ● Krakow       | ● Arab Potash Company                             |
| ● Deutag       | ● Jordan Potash Mining & Aqaba Container Terminal |
| ● JSL          | ● SABIC group industries                          |
| ● DESCON       | ● Pakistan Petroleum Ltd.                         |
| ● Saudi Aramco | ● Pakistan State Oil                              |
| ● KESC         |   |

## INVESTMENT PACKAGES

Please checklist the package that you are attending!

	Root Cause Analysis SCHEDULES	LOCATION	PRICE
<input type="checkbox"/>	10 <sup>th</sup> - 13 <sup>th</sup> June 2025	Kuala Lumpur, Malaysia	USD 2,995
<input type="checkbox"/>	16 <sup>th</sup> - 19 <sup>th</sup> June 2025	Bandung, Indonesia	USD 2,995
<input type="checkbox"/>	19 <sup>th</sup> - 22 <sup>nd</sup> August 2025	Kuala Lumpur, Malaysia	USD 2,995
<input type="checkbox"/>	25 <sup>th</sup> - 28 <sup>th</sup> August 2025	Bandung, Indonesia	USD 2,995
<input type="checkbox"/>	22 <sup>nd</sup> - 25 <sup>th</sup> September 2025	Bangkok, Thailand	USD 2,995
<input type="checkbox"/>	04 <sup>th</sup> - 07 <sup>th</sup> November 2025	Kuala Lumpur, Malaysia	USD 2,995
<input type="checkbox"/>	10 <sup>th</sup> - 13 <sup>th</sup> November 2025	Bali, Indonesia	USD 3,195

\* All prices are subject to change without notice and are not guaranteed, except that prices for an order that have been accepted by PetroSync is not subject to change after acceptance

\* Price is nett excluding Withholding Tax if any and will be quoted separately. Please send us the withholding tax payment receipt.

### DELEGATE DETAILS

1st Delegate Name \_\_\_\_\_ Mr  Mrs  Ms  Dr  Others

Direct Line Number: \_\_\_\_\_ Email: \_\_\_\_\_

Mobile Number: \_\_\_\_\_ Job Title: \_\_\_\_\_

Department: \_\_\_\_\_ Head of Department: \_\_\_\_\_

2nd Delegate Name \_\_\_\_\_ Mr  Mrs  Ms  Dr  Others

Direct Line Number: \_\_\_\_\_ Email: \_\_\_\_\_

Mobile Number: \_\_\_\_\_ Job Title: \_\_\_\_\_

Department: \_\_\_\_\_ Head of Department: \_\_\_\_\_

3rd Delegate Name \_\_\_\_\_ Mr  Mrs  Ms  Dr  Others

Direct Line Number: \_\_\_\_\_ Email: \_\_\_\_\_

Mobile Number: \_\_\_\_\_ Job Title: \_\_\_\_\_

Department: \_\_\_\_\_ Head of Department: \_\_\_\_\_

\*Please fill all the details including mobile number. This help us to contact participant if they are late in class or if there is any urgent update (through whatsapp/call)

### INVOICE DETAILS

Attention Invoice to: \_\_\_\_\_

Direct Line Number: \_\_\_\_\_ Fax: \_\_\_\_\_

Company: \_\_\_\_\_ Industry: \_\_\_\_\_

Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

Country: \_\_\_\_\_ Email: \_\_\_\_\_

Please note:

- Indicate if you have already registered by Phone  Fax  Email  Web

- If you have not received an acknowledgement before the training, please call us to confirm your booking.

### PAYMENT METHODS

By Credit Card

By Direct Transfer : Please quote invoice number(s) on remittance advice

**PetroSync Global Pte Ltd Bank details:**

Account Name : PetroSync Global Pte Ltd

Bank Name : DBS Bank Ltd

Bank Code : 7171 • Bank Swift Code : DBSSSGSGXXX • Branch code : 288

Account No : 0288-002682-01-6-022 (USD)

Bank Address : 12 Marina Boulevard, Level 3. Marina Bay Financial Centre Tower 3. Singapore 018982

All bank charges to be borne by payer. Please ensure that PetroSync Global Pte Ltd receives the full invoiced amount.

### Confirmation

I agree to PetroSync's payment terms and cancellation policy.

Signature : \_\_\_\_\_

Date : \_\_\_\_\_

PAYMENT TERMS : Payment is due in full at the time of registration. Full payment is mandatory for event attendance.

## PROGRAMME CONSULTANT

Contact : Cay Aagen

Email : registration@petrosync.com

Phone : +65 3159 0800

## TERMS AND CONDITIONS

### DISCLAIMER

Please note that trainers and topics were confirmed at the time of publishing; however, PetroSync may necessitate substitutions, alterations or cancellations of the trainers or topics or location (classroom / Virtual). As such, PetroSync reserves the right to change or cancel any part of its published programme due to unforeseen circumstances. Any substitutions or alterations will be updated on our web page as soon as possible.

### DATA PROTECTION

The information you provide will be safeguarded by PetroSync that may be used to keep you informed of relevant products and services. As an international group we may transfer your data on a global basis for the purpose indicated above. If you do not want us to share your information with other reputable companies, please tick this box

### CANCELLATION POLICY

Delegates who cancel after the training is officially confirmed run by email, are liable to pay the full course fee and no refunds will be granted. You may substitute delegates at any time as long as reasonable advance notice is given to PetroSync.

In the event that PetroSync cancels or postpones or change the trainer or change the training location (classroom / virtual) of an event for any reason and that the delegate is unable or unwilling to attend in on the rescheduled date, you will receive a credit voucher for 100% of the contract fee paid. You may use this credit voucher for another PetroSync to be mutually agreed with PetroSync, which must occur within a year from the date of postponement.

PetroSync is not responsible for any loss or damage as a result of the cancellation policy. PetroSync will assume no liability whatsoever in the event this event is cancelled, rescheduled or postponed due to any Act of God, fire, act of government or state, war, civil commotion, insurrection, embargo, industrial action, or any other reason beyond management control.

### CERTIFICATE OF ATTENDANCE

80% attendance is required for PetroSync's Certificate of Attendance.

## DETAILS

Please accept our apologies for mail or email that is incorrectly addressed.

Please email us at registration@petrosync.com and inform us of any incorrect details. We will amend them accordingly.

### Find us on Social Media:

 PetroSync Global Pte Ltd

 PetroSync

 PetroSync

## CHARGES & FEE(S)

- For Payment by Direct Telegraphic Transfer, client has to bear both local and oversea bank charges.

- For credit card payment, there is additional 4% credit card processing fee.