ROOT CAUSE ANALYSIS

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

08th - 11th June 2020 at Bangkok, Thailand | 25th - 28th August 2020 at Kuala Lumpur, Malaysia | 01st - 04th September 2020 at Bandung, Indonesia
10th - 13th November 2020 at Kuala Lumpur, Malaysia | 17th - 20th November 2020 at Bandung, Indonesia

Petrosync Lecturer
Akhtar Quddus
Managing Director
MaxTrain International

- 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.’
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

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08:10</td>
<td>Registration (Day1)</td>
</tr>
<tr>
<td>08:10 – 10:00</td>
<td>Session I</td>
</tr>
<tr>
<td>10:00 – 10:15</td>
<td>Refreshment &amp; Networking Session I</td>
</tr>
<tr>
<td>10:15 – 12:30</td>
<td>Session II</td>
</tr>
<tr>
<td>12:30 – 13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30 – 15:00</td>
<td>Session III</td>
</tr>
<tr>
<td>15:00 – 15:15</td>
<td>Refreshment &amp; Networking Session II</td>
</tr>
<tr>
<td>15:15 – 16:00</td>
<td>Session IV</td>
</tr>
<tr>
<td>16:00</td>
<td>End of Day</td>
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</tbody>
</table>

*Schedule may vary for each training*
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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
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
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- OHSAS 18001 Lead Auditor

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

Please checklist the package that you are attending!

<table>
<thead>
<tr>
<th>Root Cause Analysis Schedules</th>
<th>Price</th>
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<tbody>
<tr>
<td>08th - 11th June 2020</td>
<td>USD 2,595</td>
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<tr>
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* Price is nett excluding Withholding Tax if any and will be quoted separately. Please send us the withholding tax payment receipt.

* Prices include lunches, refreshments and training materials.

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 call)

INVOICE DETAILS

Attention Invoice to: __________________________
Direct Line Number: __________________________ Fax: __________________________
Company: __________________________          Industry: __________________________
Address: __________________________          Postcode: __________________________
Country: __________________________          Email: __________________________

Please note:
1. If you are already registered by Phone ☐ Fax ☐ Email ☐ Web ☐
2. You have not received an acknowledgement before the training, please call us to confirm your booking.

PAYMENT METHODS

☐ By Credit Card:
  Please debit my credit card: ☐ Visa ☐ MasterCard ☐ AMEX
  Security Code: __________________________
  Card Number: __________________________ Expiry Date: __________________________

☐ 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.: • SGD: 288-901898-0 • USD: 0288-002682-01-6

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 terms & conditions, payment terms and cancellation policy.

Authorized Signature __________________________

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