

ROOT CAUSE ANALYSIS

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

26th - 29th October 2015, 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 with the area of expertise:
 - Incident Investigation, Root Cause Analysis and Trend Analysis
 - NEBOSH International Certificate in Occupational Health & Safety
 - NEBOSH International Technical Certificate in Oil & Gas Operational Safety
 - IOSH Managing Safely
 - IRCA certified Lead Auditor for OHSAS-18001
 - HAZOP Leader
 - Life Member Pakistan Engineering Council, Fellow Institute of Engineers Pakistan, Founder Member Fire Protection Association Pakistan, Member IOSH, Member IIRSM, Member RoSPA

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'

Specialty Design 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.

Supported by



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

The course objectives are to:

- ▶ 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

Program Schedule

| | |
|---------------|--------------------------|
| 08:00 – 09:00 | Registration (Day1 only) |
| 09:00 – 11:00 | Session I |
| 11:00 – 11:15 | Refreshment |
| 11:15 – 13:00 | Session II |
| 13:00 – 14:00 | Lunch |
| 14:00 – 15:30 | Session III |
| 15:30 – 15:45 | Refreshment |
| 15:45 – 17:00 | Session IV |
| 17:00 | End of Day |

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 thru 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 Lecturer



Akhtar Quddus

Managing Director
MaxTrain International

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

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.

Fields of Competence

- Incident Investigation & RCA
- NEBOSH IGC
- IOSH Managing Safely
- CIEH accredited
- HABC, OGSC, OPITO - IMIST, OHSAS 18001
- Crane Inspections & Safe Lifting Practices
- Work at Heights & Scaffoldings
- Contractor Safety Management Systems
- Competency Assessment & Management
- Risk Assessment
- HSE Inspections & Audits
- Behavior Based Safety Programs
- Safety Leadership Assessment & HSE Culture Surveys
- Control of Work Procedures
- Confined Space Entry

COURSE DETAILS

Title : Root Cause Analysis
 Date : 26th - 29th October 2015 | Bandung, Indonesia

INVESTMENT PACKAGES

Please checklist the package that you are attending!

| Investment Package | Deadline | Course Fee |
|--|----------------|--|
| <input type="checkbox"/> Standard Price | 23rd Oct 2015 | SGD 3,195 |
| <input type="checkbox"/> Early Bird Offer | 25th Sept 2015 | SGD 2,995 |
| <input type="checkbox"/> Group Discount (3 or more Delegates) | 23rd Oct 2015 | 10% discounts for group of 3 registering from the same organization at the same time |

- * Early Bird Offer is one month before the event schedule
- * To enjoy the promotion & discount offer, payment must be made before deadline
- * For 5 or more delegates, please inquire for more attractive package.
- * Prices include lunches, refreshments and materials. Promotion & discount cannot be combined with other promotional offers.
- * Important: Please note that registration without payment will incur a SGD 200 administration fee.

DELEGATES DETAIL

1st Delegate Name _____ Mr Mrs Ms Dr Others

Direct Line Number: _____ Email: _____

Job Title: _____ Department: _____

Head of Department: _____

2nd Delegate Name _____ Mr Mrs Ms Dr Others

Direct Line Number: _____ Email: _____

Job Title: _____ Department: _____

Head of Department: _____

3rd Delegate Name _____ Mr Mrs Ms Dr Others

Direct Line Number: _____ Email: _____

Job Title: _____ Department: _____

Head of Department: _____

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 :
 Please debit my credit card: Visa MasterCard AMEX Security Code: [][][][][][]
 Card Number: [][][][]-[][][][]-[][][][][][][][][]-[][][][][][][][][][] Expiry Date: [][][][][][][][]
 Name printed on 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 : DBSSSGSX • Branch code : 288
 Account No : • SGD : 288-901898-0 • USD : 0288-002682-01-6
 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 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.

PROGRAMME CONSULTANT

Name : Cay Aagen
 Email : registration@petrosync.com
 Phone : +65 6415 4500
 Fax : +65 6826 4322

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. 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

You may substitute delegates at any time as long as reasonable advance notice is given to PetroSync. For any cancellation received in writing not less than fourteen (14) working days prior to the training course, you will receive a **credit voucher** worth total transaction with less a SGD 200 administration fee and any related bank or credit card charges.

Delegates who cancel less than fourteen (14) working days of the training course, or who do not attend the course, are liable to pay the full course fee and no refunds will be granted.

In the event that PetroSync cancels or postpones 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

70% 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.

CHARGES & FEE(s)

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

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