



Chilworth Process Safety Academy

“ [\(1/9/2011\) Explosion shuts down Canada's
Horizon Oil Sands](http://www.oilandgasinternational.com/directories/hse.aspx)”

Read more: <http://www.oilandgasinternational.com/directories/hse.aspx>

RISK MANAGEMENT

Risk assessment techniques using both qualitative & quantitative approach to make informed risk management decisions

New Delhi: 12th August 2011
Registration: 8:45am

“Oil and gas industry offshore safety warning issued”

The offshore oil and gas industry has been warned to improve safety, after a year which saw a big rise in injuries to workers and other serious incidents.

**THE EXPERTS IN
PROCESS SAFETY**

Chilworth
GLOBAL

Risk assessment techniques using both qualitative & quantitative approach to make informed risk management decisions

1 Day Course: 12th August 2011

Introduction:

Risk management is a blanket term covering the identification and evaluation of threats, hazards or other exposures to losses/costs. Assessments utilise a large number of techniques ranging from a detailed Quantitative Risk Analysis (QRA) to more abstract techniques such as Hazard Identification (HAZID) and Hazard and Operability (HAZOP) studies, which rely on expertise and judgement. Chilworth Group adopts a flexible approach to risk assessment, which allows the integration of elements from both hard and soft within an analysis. A risk assessment typically provides the basis on which subsequent risk management decisions can be made.

HAZID studies involve identification of hazards and the events, which may lead to risk to either people, Environment, Asset or companies' reputation, provides a logical starting point for risk management. Systematic appraisal of what might go wrong, combined with ranking in terms of severity, gives a structured basis on which to develop the management strategy.

HAZOP studies, which are common in the industry, provide a means to systematically identify deviations from design. Chilworth Group provides HAZOP services and similar studies in a cost-effective manner. The group's HAZOP experience ranges from simple plant items to complete facilities.

QRA has been long established in the Oil & Gas industry and combines hazard identification with an assessment of the frequency and magnitude of hazardous events to determine the risk(s), which is then evaluated against tolerability criteria. Full QRA studies frequently encompass several of the other risk management aspects, e.g. modelling of system behaviour, system reliability and the effectiveness of safety systems.

Conventional QRA has been extended by Chilworth in applications such as Deconstruction Risk Assessment and Typhoon Risk Assessment depending on the local conditions and client requirements.

Blast Overpressure can significantly increase risk to a facility as it can cause a significant escalation to adjoining facilities and equipment. The use of properly defined blast walls, particularly in the offshore industry, can considerably reduce the risk to people and asset. Chilworth Group uses a range of blast models to assess the consequence of blast overpressures to determine proper blast wall rating that suits the desired risk reduction.

Poor **Ventilation** can significantly increase risk of explosion in a congested plant layout. Chilworth carries out ventilations

study and analyzes the potential of increased risk of explosions due to congestion of equipment / facility.

Evacuation, Escape and Rescue Analysis (EERA) is part of Formal Safety Assessment (FSA). Chilworth Group has performed EERA to assess the risk associated with Evacuation, Escape and Rescue activities following an accidental event on an offshore installation.

Emergency Systems Survivability Assessment (ESSA) is part of FSA. Chilworth Group has performed ESSA to assess the risk associated with failure of emergency systems due to an accidental event on an offshore installation.

Temporary Refuge (TR) is provided on installation to enable orderly muster and evacuation of personnel during an emergency. Chilworth Group has performed TR Analysis to assess its integrity under major accidental events on an offshore installation.

Safety Critical Elements and Performance Standards: The UK HSC defines Safety Critical Elements as the parts of an installation which prevent, control or mitigate Major Accident Hazards and the failure of which could cause or contribute substantially to a major accident. The Safety Critical Elements represent the barriers which prevent, control or mitigate the major accident scenarios. Once these are defined and identified, each SCE is assigned a performance standard that defines the essential measures provided to manage major accident hazards and events requiring escape, mustering, evacuation, and rescue. These performance standards may include specifying the functional goals for each system, determining the required reliability/availability, determining the required survivability, determining the required dependence / interactions.

THE COURSE LEADER

Jitendra Kumar, Vice President at Chilworth India. An IIT Delhi Chemical Engineer with almost 19 years of Safety and risk management consulting experience. He is managing the Asian business in Safety, Risk Management and Environment for various clients. His work experience includes executing and managing Safety and Risk consulting assignments at over 350 sites in globally. He has worked for all major names such as Shell International, British Petroleum, Exxon, Conoco Philips, Premier Oil, Total, Reliance, ONGC, IOC, HPCL, BPCL, IPCL and a number of EPC companies in Oil and Gas sector. He has worked in US, UK, Europe, South East Asia, Middle East and India thereby exposed to the best in the industry.

Call 011 26136979 to reserve your place today



Book by 15th July 2011 & receive our 5% Early Bird Discount

REGISTRATION DETAILS: by fax +91 011 26135979 / or email
msharma@chilworth.co.in;
Send Cheque / DD in favour of "Chilworth Technology Pvt Ltd."

Dr/Mr/Mrs/Ms/Miss: _____

Job Title: _____

Company Name: _____

Address: _____

Pin Code: _____ Country: _____

Mobile: _____ Email: _____

Please book me for:

Risk Management – Friday 12th August 2011 – Rs. 9,500 +Service

Taxes

I wish to claim:

A 5% Early bird discount on bookings received before 15th July 2011

OR

A 5% discount – when booking for 2 or more colleagues on this course

I cannot attend any of the above courses, but I would like a **FREE** consultation with a Chilworth Process Safety Specialist

Signature: _____ Date: _____

Participants will learn:

The course is designed to provide an overview of

- Various tools that are globally used for Risk Management.
- Most of these have already been adopted as regulations in Europe, Middle East and South East Asia.
- OISD has recommended these tools for Indian industry, and over a period of time they are sure to turn into legislation.
- From broad hazard identification in HAZID, structured design check in HAZOP, assessing risk and finding major contributors in QRA to analysis of Emergency Safety Systems, Safety Critical Elements, concept of ALARP to documentation of Safety Case.
- The course shall cover most of aspects that are relevant for a typical O&G project.

Who Should Attend:

- Top management handling HSE functions
- Process and HSE technocrats
- Design team members
- EPC companies managing Oil and Gas projects
- Plant Managers and Project Managers
- Process Control Specialists
- Risk Assessors

To reserve your place for the course

Call: 011 26136979

Fax: 011 26135979

Email: msharma@chilworth.co.in

The Venue



Location: Jaypee Vasant Continental
Vasant Vihar, New Delhi-110057
Ph No: 011-26148800

Cancellations: All reservations in writing are subject to cancellation conditions. Written cancellations received up to 5 working days before the course date will be subject to an administration charge of Rs. 2500+Service Tax. No refunds will be made for cancellations received after this date, or for non-attendance, but copies of the course documentation will be sent. Substitutions may be made at any time up to the start of the course. Chilworth Technology reserves the right to modify or cancel the course up to 5 working days prior to the commencement date.

About Us:

Chilworth Global brings together leading experts in the field of process safety with state-of-the-art GLP compliant safety laboratories to provide a single point of contact for all your process safety needs. Our GLP compliant laboratories cover four areas of process safety, fire and explosion hazards, chemical reaction hazards, electrostatic properties and regulatory testing. Supporting our laboratories and providing independent and impartial advice is our consultancy team. A group of dedicated engineers and scientists who specialise in the field of industrial explosion hazards, chemical process evaluation, vent sizing (DIERS), HAZOP, electrostatic hazards and production problems, incident investigation, SIL studies, expert witness and process safety training. Our consulting staffs are internationally acknowledged experts in their specialist fields and regularly speak at international forums on process safety. Chilworth has a quarter century of experience in training, testing, consulting, designing and manufacturing instruments for process safety applications throughout the World.

Chilworth Technology Pvt Ltd:

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