ACCIDENT & INCIDENT INVESTIGATION:
DETAILED RCA & CORRECTIVE ACTIONS HSE004

COURSE DESCRIPTION

The natural tendency of many individuals and Organisations when presented with a problem is to jump to a solution, any solution. They do not systematically analyze the problem to determine a root cause before considering potential solutions. Reliability engineering and predictive maintenance aims at preventing catastrophic failures of critical plant production systems and avoiding deviations from acceptable performance levels that result in personal injury, environmental impact, capacity loss, or poor product quality.

This course provides clarification of regulatory expectations and guidance, and the Essential skills necessary to ensure effective and efficient investigations. Topics will examine each step of the investigation process from failure identification and notification through documentation. Participants will practice root cause analysis techniques and Identify corrective and/or preventive actions towards successful remediation.

COURSE GOAL

To enhance the participants' knowledge, skills, and abilities necessary for better understanding of root cause analysis and investigation and how to perform it, when incidents occur and how to identify proactive systems, and develop recommendations as well as documenting the investigation.

COURSE OBJECTIVES

By the end of this course, participant will be able to

- Understand Root Cause Analysis and identify potential applications.
- Deal with the root causes of failures (Physical Roots and Human Roots).
- Know how the multiple roots interact.
- Handle the general analysis techniques and the root cause failure analysis methodology.
- Establishing safe operating limits for machinery and regulatory compliance issues.
- Distinguish the sources of stresses, overload failures.
- Understand the interpretation of collected data through vibration analysis.
- Formalize failure reporting as a teaching tool.
- Communicate the "Seven-Cause Category approach" to Root-Cause Failure Analysis.
- Assist a team to conduct an investigation for possible causes.
- Develop, cost, implement and document a solution to the problem.

WHO SHOULD ATTEND

- Personnel who are responsible for the failure and deviation investigation process.
- Maintenance engineers.
- Those newer to this field.
- Those who wish to refresh their knowledge of root cause analysis and investigative techniques.

COURSE DURATION

5 Working Days

COURSE OUTLINES

- Overview of Root Cause Analysis / Incident Investigation.
- Performing Root Cause Analysis / Incident Investigation.
- When the incident occurs.
- Data gathering.
- Forming the Incident Investigation Team.
- Developing the sequence of events.
- Identifying protective systems.
- Determining root causes (Why Tree & Five Why).
- Verifying potential cause.
- Why Tree critical success factors.
- Developing recommendations.
- Documenting the investigation.
- Reviewing and issuing the report.
- Root Cause categorization.