

# Equipment and Process Investigation Programme Overview

## Introduction

In spite of all our best efforts, equipment and process deviations that result in loss of operational revenue, equipment failure and in worst case injuries to people occur. Critically, to drive improvements, all incidents should be thoroughly investigated using proven methodologies.

Different levels of incidents demand the use of **appropriate assessment tools and techniques**. Minor process deviation or losses may reveal significant potential for a serious future incident should the conditions be left uncorrected. Industry experience and recent developments in investigative thinking show how impactful minor deviations can be if undetected.

ARMSA developed this programme to help professionals acquire knowledge and confidence to perform **investigations utilising proven Root Cause Analysis techniques** for the high consequence sector.

## Programme Objectives

The programme will enable delegates to perform equipment and process investigations ensuring that they correctly identify and address root causes that drive sustained improvements. Delegates will:

- Understand why investigation is an essential tool in minimising asset downtime and unplanned breakdowns.
- Understand the roles and responsibilities of key members within an incident investigation team.
- Explore different types of incident investigation methods using both uni-casual and multi-casual analysis and utilise Root Cause Analysis to correctly identify underlying issues and failures.
- Discover how causal analysis and improvement measures are used to enable effective business decision making and yield continuous improvement.

- Contribute to a positive and continuously improving organisational culture.
- Apply a professional and well-structured approach to equipment and process failure investigations.
- How to identify corrective measures to avoid recurrence.
- Produce a personal improvement action plan.
- Understand how an integrated approach to equipment and process investigations delivers continuous improvement.

## Who should attend?

This programme is designed for professionals who have to perform equipment and process investigation in a high consequence environment e.g.

- Engineering Managers
- Engineers
- Operations & Maintenance (O&M) Managers
- O&M Engineers
- Performance and Process Engineers

## Programme duration, preparation & materials

This is a 2-day course that will include practical exercises and an assessment. Delegates must have a basic awareness and understanding of the organisation's business processes. Copies of the programme materials will be provided and delegates will receive a certificate of attendance upon successful programme completion.

## Programme content

- Introduction to incident investigation and reporting – principles and theory
- Understanding the business context – drivers and enablers
- Roles and responsibilities
- Integrated investigation approach
- Selecting the correct level of investigation
- Information gathering
- Root Cause Analysis tools
- Corrective actions and report preparation
- Framework for continuous improvement

