Root Cause Analysis Training Workshop

Potential PDH: 16

Description:

- Understand the critical role of identifying root causes in effective problem-solving.
- Learn common methodologies for practical root cause analysis.
- Recognize common pitfalls and strategies for overcoming them.
- Application of RCA methodology using interactive break-out sessions.

Outline:

Module 1: Introduction to Root Cause Analysis (RCA)

- What is Root Cause Analysis?
- Root Cause Identification
- Physical, Human, and Latent Root Causes
- Principles of Root Cause Analysis
- Applications of Root Cause Analysis

Module 2: Root Cause Analysis Categories

- Safety/Environmental Based
- Product or Production Based
- Process Based
- Asset Failure Based

Module 3: Root Cause Analysis Work Process Overview

- Define the problem (failure)
- Collect data/evidence.
- Identify possible causal factors.
- Develop solutions and recommendations.
- Implement the recommendations.
- Track and analyze recommended improvements for effectiveness.

Module 4: Root Cause Analysis Common Methods and Tools

- 5-why process
- Cause & Effect Analysis – Fish Bone
- Cause Mapping
- Fault tree Analysis

- Sequence of Events

Module 5: Failure Incident Reviews, Exercises and Case Studies

- Industry and/or site failure incidents review
- Case study discussions
- Interactive RCA exercises

Who Should Attend:

- Maintenance and Reliability Engineers
- Discipline Engineers (Process, Machinery, and Fixed Equipment)
- Leadership and Management Representatives
- Health, Safety, and Environmental (HSE) Professionals

***Cross-Functional Teams Attendance Encouraged**

Subject Matter Expert (SME):

LaKeshia Taylor is the Global Reliability Group Lead at Becht, where she leads a team of engineers and subject matter experts (SMEs) supporting clients across the refining, petrochemical, and chemical industries. With over 20 years of experience, LaKeshia brings deep expertise in reliability and maintenance engineering, with a focus on both fixed and rotating equipment. She supports clients in developing comprehensive equipment strategies, conducting RAM (Reliability, Availability, and Maintainability) studies, performing root cause failure analysis (RCFA), and identifying and closing reliability gaps. In addition, she works extensively with aboveground storage tank owners on risk assessments, program optimization, and regulatory compliance.

LaKeshia is a Fellow in Energy Law and Regulation at Tulane Law School, where she is advancing her expertise at the intersection of energy and environmental policy, regulation, and industry practice. She is also an active API committee and task force member, helping shape industry standards and best practices in asset integrity, reliability, and mechanical integrity. Prior to her consulting career, she held a range of technical and leadership roles in plant operations, where she led cross-functional teams and delivered sustainable improvements in asset performance and project execution.