

FMECA / Strategic Planning (Combined 5 Day) Green-Belt Workshop

Who Should Attend?

All CMRP's, CRL's and CRCMP's looking to Sharpen their Skills in Identifying Bad Acting or Critical Equipment and understand the required Strategies to Change that Equipment's Reliability.

ALL Oil & Gas / Chemical Reliability Engineers and Senior Maintenance personnel who want to learn why their RCM programs are not more effective...

All RCM Consultants wishing to develop a strong foundation in FMECA (Criticality Analysis) / Strategic Maintenance Planning.

Day One

Risk Based Asset Maintenance

Organizational Culture Change

Lunch Break

Understanding Systems Analysis

- FMEA
- SFMEA
- FMECA

Day Two

Learning not to over complicate things...

- Setting Clear Objectives
- Finding the Bad Actors
- Focusing on Functional Failures and Function Loss
- RAMS VS FMECA (The Classic Mistake)

Functional Failure Modes Practice

- Equipment
- Components

System Identification

System Function Statement

FMECA Workshop

- **Working in Groups to Perform FMECA Risk Analysis**
- **Define a System** ○ Define Supporting Sub-Systems ○ Write a Systems Function Statement
○ Choose a Systems Flow Diagram ○ Choose a P&ID
- **Form an Equipment and Component List – USE Laptop and MS-Excel** ○ List all System Equipment and Components ○ Equipment Name and ID Number and Basic Function

- Identify Functional Failure Modes
- Identify Environmental or Safety Malfunctions
- **Perform a Risk Analysis on each Functional Failure Mode and Env. & Safety Malfunction**

Day Three

Continue with FMECA Exercise from Day Two

- Finish all Risk Analysis Sheets before lunch time!
- Enter Risk Analysis Sheet Data into the Master FMECA Spreadsheet

Classroom Exercise – Discuss the findings for Bad Actors

- Operationally Critical Equipment
- Safety & Enviro Critical Equipment

Closing Discussions

Lessons Learned

Day Four

Strategic Planning Basics

- Redefining Troubleshooting
- Processes with Reliability in Mind
- (SMP) Strategic Maintenance Procedures
- The Real Cost of the Fix and Go Mindset

Lunch Break

Strategic Planning Workshop

- Writing a Strategic Plan – Group Workshop
- Discussion, Consensus and Decision
- Writing the plan
- Developing the process implementation

End of Training Day

Day 5

Project Management Overview

- Teams
- Work Packages
- Total Time Requirement
- Deadlines and Milestones

Lunch Break

Write a complete Strategic Maintenance Plan for a given equipment by yourself...

- An incomplete plan will jeopardize your qualification for Green-Belt...

4:00 – 5:00 PM

Ending Ceremony – Presentation of Belts

End of Day