PIGGING OPERATIONS PRD062

COURSE DESCRIPTION

Pigging Operations is an in-depth course designed to provide participants with a thorough understanding of pipeline pigging processes and their critical role in maintaining and inspecting pipeline systems. The course covers various aspects of pigging operations, including different pig types, maintenance strategies, hazard assessment, safety protocols, and emergency procedures. Through a combination of theoretical knowledge and practical case studies, participants will gain the skills necessary to effectively plan, execute, and manage pigging operations.

COURSE OBJECTIVES

By the end of this training course, participants will be able to:

- Understand the fundamentals of pipeline pigging, including the different types of pigs and their specific applications.
- Implement effective inspection and maintenance methods using utility and smart pigs.
- Conduct comprehensive hazard assessments to identify and mitigate potential risks associated with pigging operations.
- Coordinate and communicate effectively with various teams involved in pigging operations.
- Apply safety protocols, including isolation, lockout/tag out procedures, venting, draining, and proper pig handling techniques.
- Develop and execute emergency response plans, including shutdown procedures and evacuation routes.
- Analyze case studies to extract valuable lessons and improve future pigging operations.

WHO SHOULD ATTEND

- Pipeline operators and engineers
- Maintenance and inspection personnel
- Safety officers and hazard assessment professionals
- Project managers involved in pipeline projects
- Technicians and field staff responsible for pigging operations
- Anyone seeking to enhance their knowledge and skills in pipeline pigging and maintenance

COURSE DURATION

5 Working Days

COURSE OUTLINES

1. Introduction to Pipeline Pigging
    - Define pipeline pigging.
    - Identify pig types and their applications.
    - Understand utility pigs' role.
2. Inspection and Maintenance Methods
    - Effective maintenance for pipeline systems.
    - Planning considerations for pigging devices.
    - Data collection and analysis using smart pigs.
    - Developing repair programs based on inspection results.
3. Hazard Assessment
    - Conducting hazard assessment.
    - Identifying potential risks
        - Pressure hazards.
        - Chemical exposure.
        - Fire and explosion risks.
    - Personal Protective Equipment (PPE).
4. Communication and Coordination
    - Coordinating launching team and receiving team.
    - Communication within operation teams.
5. Isolation and Lockout/Tag Out
    - Securing the pipeline and launcher/receiver.
6. Venting and Draining
    - Gas and liquid removal from pipeline.
7. Pig Handling Safety
    - Proper lifting techniques.
    - Securing pigs during loading and unloading.
8. Emergency Procedures
    - Training personnel on emergency response protocols.
    - Emergency shutdown procedures.
    - Evacuation routes and assembly points.

9. Case Studies and Lessons Learnt

- Review of case studies.
- Discussion of lessons learned from past operations