TDP Engineering Ltd.

A pipeline operations specialist offering process improvement and process manual creation and improvement; enabling large and small operators to achieve industry best practices.

Services

Leak Detection and Control Room Management: Assess current programs to identify regulatory compliance and performance gaps and implementing operational improvements to enhance KPIs.

Pipeline Operations: Develop and implement process and operational improvements for: Pressure Cycling, Commercial Operations, Facility Monitoring, KPIs and GOTs, and Performance Monitoring.

Process Safety: Assess processes, develop and deliver training for Process Safety Fundamentals. Conduct Process Safety Incident Review/Analysis and investigations and follow-up reporting.

Risk Management: Create or improve existing processes including Risk Assessment (HAZOP/WhatIf/HAZID, etc.), Risk Management Program Development, Risk Matrix Development.

Background

A **Senior Professional Engineer with 25 years** in pipeline operations, working as a technical expert for process improvement and documentation for pipeline design, start-up, and expansion. A proven track record of tackling large, company-wide engineering, operational and management system challenges.

- Designed and implemented new Process Safety Program that increased visibility of Process Safety Fundamentals in field and engineering staff for 590kbpd pipeline.
- Planned and managed a HAZOP refresh of all Liquids facilities that led to the identification of over 200 new Process Safety Risks and tracked resolution close-out.
- Designed and built workload assessment, tracking tool and controller workload resulting in a ~50% reduction in controller workload for the highest workload consoles, reducing operational and regulatory risk.
- Designed and built a user configurable facility volume balance and accounting tool resulting in reduced shipper complaints.
- Designed and implemented an Operational Pressure Cycling Management Program which resulted in an ~50% reduction in pressure cycling in critical areas.
- Supervised an engineering team deploying a major upgrade to the computational leak detection system with limited operational impact.
- Developed Control Room Management (CRM) manual for control centre operations to comply with new PHSMA CRM regulation resulting in no findings from three regulatory audits.
- Developed Leak Detection OQ Program resulting in successful qualification of Leak Detection Controller team to operate the new Leak Detection Console.
- Supported the validation, QA, and QC of updates and bug fixes for Computational Leak Detection System and Controller Training Simulator.
- Developed a Management of Change process eliminating end user resistance to rolling out of critical system updates.
- Developed internal development processes for vendor Leak Detection system, ensuring ongoing quality control capacity.

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Experience

South Bow/TC Energy

Process Safety Lead

2021 - 2024

Systems Operations Specialist

2019 - 2021

Leak Detection Technology Initiatives & Business Development Support Team Lead2014 - 2019

Regulatory Compliance & Quality Specialist (Oil Control Centre) 2012 - 2014

Leak Detection Lead Specialist (Oil Control Centre)

2011 - 2012

Energy Solutions International

Senior Project Engineer and Account Executive 2005 - 2011

TCENet Inc.

Senior Product Engineer

2003 - 2005

Technical Leader / Project Leader 1998 - 2003

Education and Accreditation

Registered Professional Engineer APEGA 2002 - Present

Bachelor of Applied Science in Engineering Physics

UBC 1998

TapRooT® Advanced Root Cause Analysis 2018