



Waste Treatment Plant Project



2016 Supply Chain Collaboration Event

Product Process Integrity Analysis (PPIA) - How Does it Ensure Success?

Commitment to Teaming

- PPIA is a tool to identify, prioritize and mitigate risk
- Fundamentally it is designed to facilitate two-way communication, and to increase the probability of success in execution of work with our suppliers.
- Identifying and addressing risk promotes a solution based approach, rather than reactionary problem solving.

Factors Contributing to Risk

- Contract terms
- Bid specifications
- Technologies
- Design margins
- Changes
- Schedule
- Project environment
- Resources
- Project imposed requirements



PPIA at WTP

▪ Three current examples

1. **Analyzer Order**
2. **Black Cell pressure vessels**
3. **Adjustable Speed Drives**

Each of the cited examples has been successful in identifying and managing risk that would or will pose quality and schedule risk to both the supplier and WTP.



Workshop Exercise

▪ Use a Sample Purchase Order and identify risks

Commodity – Skid Mounted Compressor

Quality Level – QL 1

Purchase Order Includes:

- Compressor (ASME Section VIII Code Stamped Vessel)
- Skid Frame (Fabricated IAW AWS D1.1)
- Piping (ASME B31.3)
- Control System including programmable software
- Electrical

Workshop Exercise

▪ Sample Purchase Order (Cont.)

Specifications Require:

- NDE of welding (VT, RT, PT)
- V&V of software
- Commercial Grade Dedication on materials of construction
- NRTL Listing and Labeling of electrical components and/or UL Field Evaluation
- System Integration factory acceptance testing
- Comprehensive documentation review (QVD)

Workshop Exercise

▪ Sample Purchase Order (Cont.)

Awarded to ACME Corporation:

- Integrator (Using sub-suppliers to provide all commodities for skid)
- Sub-suppliers are located in five different states and none have been audited by ACME
- Has never performed work for WTP
- Schedule provided is aggressive and contains only 2 weeks contingency to meet delivery date

Workshop Exercise

▪ Sample Purchase Order (Cont.)

Let's Get Started:

- Tool used to identify and prioritize risk
 - [Risk Identification Worksheet.xlsx](#)
- What stands out as the potential # 1 risk overall?
- Other risks?
- What does a completed risk worksheet look like for an active PPIA at WTP?
 - [Sample Completed PPIA Worksheet.xlsx](#)

PPIA Path to Success



- Objective is to identify, prioritize and manage identified risk
- Increases understanding of Bechtel's and Supplier's/Sub-contract's weaknesses
- Cross functional team and SMEs brought together
- Enables informed risk mitigation and action plans
- Collaborative and transparent

