

REQUEST FOR PROPOSAL (RFP)

Thompson-Hendrix

PROJECT OVERVIEW

Name: Refine Veronica Safety Compliance
Type: Safety Compliance
Location: Port Veronica, FM (Industrial Park)
Industry: Oil & Gas
Value: \$1,815,381
Complexity: 2/5
Date: April 09, 2025
Disciplines: Structural Engineering, Instrumentation & Controls, Piping & Pipeline
Regulations: OSHA Regulations, EPA Requirements

SCOPE OF WORK

Scope of Work: Oil & Gas Facility Upgrade ? Process Pump Replacement & Auxiliary Systems Enhancement

Project Goal: Upgrade an existing oil & gas processing facility by replacing a primary process pump and enhancing associated auxiliary systems to improve efficiency and safety, complying with all relevant OSHA and EPA regulations.

Discipline: Structural Engineering

1. Platform Reinforcement: Assess the existing pump platform's structural integrity to accommodate the new, heavier pump (estimated weight: 15,000 lbs). Design and detail necessary reinforcements using A36 steel, including new support columns and bracing, ensuring compliance with ASCE 7-16 wind load standards (100 mph design wind speed). Deliverables include detailed shop drawings, structural calculations, and a revised platform load rating certificate.
2. New Access Platform: Design and detail a new access platform around the pump, including handrails, grating, and stairs to facilitate maintenance and repairs. This platform will utilize aluminum for weight reduction and corrosion resistance. The design should comply with OSHA 29 CFR 1910 Subpart D requirements for fall protection and access. Deliverables include 3D model, detailed fabrication drawings, and a bill of materials.

Discipline: Instrumentation & Controls

1. Pump Monitoring System Upgrade: Design and specify a new PLC-based pump monitoring system including pressure, temperature, and vibration sensors (specify sensors: e.g., Rosemount pressure transmitters, Endress+Hauser temperature sensors). The system will integrate with the existing facility SCADA system to provide real-time monitoring and alarm functionality, adhering to ISA-84.1 standards. Deliverables include system architecture diagrams, instrumentation loop drawings, and a panel layout drawing.
2. Emergency Shutdown System Integration: Integrate the new pump into the existing emergency shutdown (ESD) system. This includes designing and implementing new logic and interlocks to automatically shut down the pump in case of critical failures or hazardous conditions, following ISA-84.01 guidelines for ESD systems. Deliverables include updated logic diagrams, safety instrumented system (SIS) calculations (SIL determination), and functional safety assessment report.

Discipline: Piping & Pipeline

1. Suction & Discharge Piping Reroute: Design and detail the rerouting of the existing 6-inch diameter suction and discharge piping (carbon steel, schedule 80) to accommodate the new pump location. The design must account for thermal expansion and ensure compliance with ASME B31.3 standards. Deliverables will include isometric drawings, piping stress analysis reports, and material specifications.
2. New Isolation Valves: Specify and detail the installation of new isolation valves (6-inch diameter, ANSI class 150) on the suction and discharge piping. Valve selection will prioritize ease of maintenance and operational reliability. The selection will be supported by valve performance calculations, vendor data sheets, and an equipment list.

Cross-Disciplinary Tasks:

1. Interference Check: Conduct a comprehensive interference check between the structural, instrumentation, and piping designs to ensure all components are properly located and avoid clashes. This will involve coordinating design changes across all disciplines using a shared 3D model. Deliverable: Updated 3D model showing all disciplines coordinated with no interferences.
2. HAZOP Study (Hazards and Operability Study): Conduct a HAZOP study for the upgraded pump system, involving representatives from all three disciplines, to identify and mitigate potential hazards. The study will follow established HAZOP methodologies, and deliverables include a HAZOP report with identified hazards, consequences, and mitigation strategies.

Complexity Impact Note: The project complexity is assessed as Level 2 due to the manageable scope involving existing infrastructure modifications rather than large-scale new construction.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Refine Veronica Safety Compliance

Project Name: Refine Veronica Safety Compliance

Location: Port Veronica Industrial Park, FM

Industry: Oil & Gas

Date Issued: April 09, 2025

Response Due: May 07, 2025

Project Start Date: May 28, 2025

Project Duration: 12 Months

Contact Email: procurement@oil&gas.com

1. Project Overview:

This RFQ solicits proposals for upgrading an existing oil & gas processing facility at Port Veronica. The project involves replacing a primary process pump (15,000 lbs) and enhancing associated auxiliary systems to improve efficiency and safety, complying with OSHA and EPA regulations. The project complexity is rated 2/5.

2. Scope of Work:

The project encompasses three primary disciplines: Structural Engineering, Instrumentation & Controls, and Piping & Pipeline. Specific tasks include (detailed scope attached as Appendix A):

- * Structural Engineering: Platform reinforcement, new access platform design.
- * Instrumentation & Controls: Pump monitoring system upgrade, ESD system integration.
- * Piping & Pipeline: Suction/discharge piping reroute, new isolation valve installation.
- * Cross-Disciplinary: Interference check, HAZOP study.

3. Qualifications:

Respondents must demonstrate at least 3 years of experience in the Oil & Gas industry with a proven track record of successful regulatory compliance projects (OSHA, EPA, ASME, ASCE, ISA).

4. Proposal Requirements:

Proposals should include:

- * Technical Approach (1-2 pages): A concise description of your proposed solution, highlighting methodology and compliance with relevant standards.
- * Detailed Cost Breakdown: A clear and itemized breakdown of all project costs, including labor, materials, and any other relevant expenses.
- * Project Timeline: A proposed project schedule outlining key milestones and deliverables.

5. Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

- * Technical Approach (50%)
- * Cost (30%)
- * Experience and Qualifications (20%)

6. Contract Type: Fixed Price

7. Important Dates:

* RFQ Release: April 09, 2025

* Questions Due: April 20, 2025

* Proposals Due: May 07, 2025

(Appendix A: Detailed Scope of Work ? attached separately)

CONTACT

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TIMELINE

Include key dates such as submission deadlines, inquiry deadlines, and project start dates.