

# REQUEST FOR PROPOSAL (RFP)

Anderson PLC

## PROJECT OVERVIEW

Name: Petro Sydneyville Safety Compliance

Type: Safety Compliance

Location: South Sydneyville, VI (Refinery Zone)

Industry: Oil & Gas

Value: \$8,008,355

Complexity: 1/5

Date: April 09, 2025

Disciplines: Process Engineering, Piping & Pipeline, Instrumentation & Controls

Regulations: EPA Requirements, OSHA Regulations

## SCOPE OF WORK

### Scope of Work: Oil & Gas Facility Minor Upgrade

**Project Goal:** Implement minor upgrades to an existing oil & gas processing facility to improve efficiency and ensure regulatory compliance (EPA & OSHA where applicable). This project focuses on a single, small processing unit.

#### 1. Process Engineering

\* **Task 1: Optimize existing flare system:** Evaluate the current flare system's capacity and efficiency, focusing on gas flow rates and pressure relief valve sizing. Develop a detailed process flow diagram (PFD) and mass balance to demonstrate improved performance after implementing modifications (new pressure relief valves with sizing calculations). Deliverables include updated PFD, calculations, and a report summarizing improvements.

\* **Task 2: Minor Process Control adjustments:** Update the existing PLC program to optimize a single unit's control loop related to temperature control within a liquid-liquid separation tank. The update will involve adjusting PID parameters to minimize temperature fluctuations and improve product quality. The updated PLC program will be tested using a simulation before implementation.

#### 2. Piping & Pipeline

\* **Task 1: Replace 50 meters of corroded 2-inch carbon steel piping:** Design and specify the replacement of 50 meters of existing 2-inch Schedule 40 carbon steel piping with new schedule 40 316L stainless steel piping to improve corrosion resistance in a specific area. The piping will connect two existing vessels, using ASME B31.3 code for design and installation. Deliverables include isometric drawings, material specifications, and a bill of materials.

\* **Task 2: Install a new 6-inch diameter bypass line:** Design and specify a new 6-inch diameter (schedule 40) bypass line around an existing valve using carbon steel pipe. The line must be designed for 500 psi operation and meet ASME B31.1 standards. Include isometrics, calculations for pressure drop, and a valve specification sheet.

#### 3. Instrumentation & Controls

\* **Task 1: Replace outdated level transmitter:** Replace an outdated level transmitter on a 10-meter storage tank with a new, intrinsically safe, 4-20 mA HART-compatible device, with specifications matching existing system architecture. This includes mounting, wiring, and configuration, ensuring compliance with all relevant safety standards. Deliverables include a wiring diagram, calibration certificate, and loop check documentation.

\* **Task 2: Upgrade existing pressure gauge:** Replace an existing pressure gauge on a processing vessel with a digital pressure transmitter. The new transmitter will provide remote monitoring capabilities via a Modbus RTU interface, providing data to the existing SCADA system. Include technical specifications, a wiring diagram, and commissioning documentation.

#### Cross-Disciplinary Tasks

\* **Task 1: HAZOP review of modified processes:** Conduct a HAZOP study covering the process and piping modifications to identify and mitigate potential hazards. This will involve joint participation from Process Engineering, Piping, and Instrumentation & Controls engineers. The deliverable is a HAZOP report detailing identified hazards, risk assessment, and recommended mitigation strategies.

\* **Task 2: Coordination of installation and commissioning:** Develop a detailed installation and commissioning plan that integrates the work of all three disciplines. This plan will outline the sequence of activities, necessary resources, and timelines to ensure a smooth and safe transition from design to operational readiness.

**Complexity Impact:** This project is appropriately classified as Level 1 complexity due to the limited scope and straightforward nature of the upgrades.

## REQUEST FOR QUOTATION

Request for Quotation (RFQ): Petro Sydneyville Safety Compliance

**Project: Petro Sydneyville Safety Compliance (Refinery Zone, South Sydneyville, VI)**

**Industry: Oil & Gas**

**Project Goal: Implement minor upgrades to improve efficiency and regulatory compliance (EPA & OSHA where applicable) at a single, small processing unit within an existing oil & gas facility.**

Scope of Work (Detailed in attached Appendix): This project encompasses process engineering modifications (flare system optimization, minor PLC adjustments), piping upgrades (pipe replacement, bypass line installation), instrumentation & control replacements (level transmitter, pressure gauge), a HAZOP review, and coordinated installation & commissioning. See Appendix for full scope.

**1. Qualifications: Bidders must demonstrate 3+ years of experience in the Oil & Gas industry with a proven track record of successful regulatory compliance projects.**

**2. Proposal Submission:** Proposals must include:

- \* A concise technical design (1-2 pages max) detailing the proposed approach for each task.
- \* A detailed cost breakdown.

**3. Evaluation Criteria:** Proposals will be evaluated based on: Technical Approach (50%), Cost (30%), and Experience (20%).

**4. Key Dates:**

- \* **RFQ Release: April 9, 2025**
- \* **Questions Due: April 23, 2025**
- \* **Proposals Due: April 30, 2025**
- \* **Project Start: May 5, 2025**
- \* Project Duration: 4 months

**5. Contract Type: Fixed Price**

**6. Submission: Submit proposals electronically to [procurement@oil&gas.com](mailto:procurement@oil&gas.com). Include a complete description of your qualifications, including relevant past projects. Attach a detailed scope of work as an appendix to your proposal.**

Appendix (Attached Separately): Detailed scope of work (as detailed in the initial prompt)

**Note: A detailed scope of work is attached separately as an appendix. This RFQ summarizes the key aspects of the project.**

## CONTACT

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## TIMELINE

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