REQUEST FOR PROPOSAL (RFP)

Nguyen, Velazquez and Bell

PROJECT OVERVIEW

Name: Chem Tommyberg Safety Compliance
Type: Safety Compliance
Location: West Tommyberg, OR (Industrial Park)
Industry: Chemical Processing
Value: $1,158,251
Complexity: 1/5
Date: April 09, 2025
Disciplines: Environmental Engineering, Piping & Pipeline, Process Engineering
Regulations: NFPA Codes, EPA Requirements

SCOPE OF WORK

Scope of Work: Chemical Processing Plant - Minor Upgrade

Project Goal: Implement minor upgrades to an existing chemical processing unit to improve efficiency and ensure regulatory compliance. This involves modifications to the existing piping system, minor process adjustments, and verification of environmental impact.

Discipline: Environmental Engineering
1. Wastewater Discharge Permit Review & Update: Review existing wastewater discharge permit against current EPA requirements for the specific chemicals processed. Identify any discrepancies and prepare a revised permit application, including updated discharge flow rates, chemical composition analysis reports (including concentrations of key pollutants such as BOD, COD, and specific regulated chemicals), and a revised monitoring plan.
2. Air Emission Inventory Update: Conduct an update to the existing air emission inventory for the processing unit, focusing on the impact of the proposed modifications. This includes calculating emissions from vents, stacks and fugitive sources, and will use EPA's AP42 methodology. Prepare a report detailing the changes and ensuring compliance with relevant National Emission Standards for Hazardous Air Pollutants (NESHAP).

Discipline: Piping & Pipeline
1. Minor Piping Rerouting (10m): Design and install a 10-meter reroute of a 4-inch diameter, schedule 40 carbon steel process piping line carrying a non-hazardous chemical (e.g., water). The design will adhere to ASME B31.3 standards, include isometrics, and utilize appropriate pipe supports and hangers; a complete bill of materials will be included. The reroute will improve access for maintenance.
2. Valve Replacement (3 units): Replace three existing 2-inch butterfly valves with new equivalent valves designed for improved corrosion resistance (e.g., stainless steel). This task includes procurement, installation, and testing of the new valves, adhering to relevant safety procedures and ensuring proper sealing, and generating a documentation of the process (photos, as-built drawings).

Discipline: Process Engineering
1. Optimization of Process Parameter: Fine-tune the operating parameters (temperature and pressure) of a single process unit to achieve a 5% improvement in yield, based on process simulations using Aspen Plus or similar software. Document the proposed changes and their predicted impact on yield, waste generation, and energy consumption. Provide a detailed report summarizing the simulations, including sensitivity analyses and risk assessment.
2. Instrumentation Calibration: Calibrate five key process instrumentation sensors (temperature, pressure, flow) to ensure accurate readings and consistent process control. This involves using appropriate calibration equipment, documenting calibration procedures, and generating certificates of calibration for each instrument, conforming to ISO 9001.
Cross-Disciplinary Tasks:
1. HAZOP Study (Hazardous and Operability Study): Conduct a HAZOP study for the modified sections of the process, involving representatives from all three disciplines. The study will identify potential hazards and operability issues related to the proposed modifications and will lead to the development of mitigation strategies documented in a HAZOP report, following industry best practices.
2. Pre-Commissioning Checklist and Procedure Development: Collaboratively develop a pre-commissioning checklist and detailed procedures for the updated piping system and process unit, covering aspects such as flushing, cleaning, leak testing, and sensor calibration. This will ensure a safe and efficient commissioning phase.

Complexity Impact: The project's complexity is appropriately classified as Level 1 due to the limited scope of the modifications and the straightforward nature of the tasks.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Chem Tommyberg Safety Compliance

Project Name: Chem Tommyberg Safety Compliance

Project Location: West Tommyberg Industrial Park, OR

Industry: Chemical Processing

Date: April 9, 2025

1. Introduction:
This RFQ solicits proposals for minor upgrades to a chemical processing unit at our West Tommyberg facility to enhance efficiency and ensure regulatory compliance. The project involves modifications to existing piping, process adjustments, and environmental impact verification. Complexity is rated 1/5.

2. Scope of Work:
The project encompasses the following key areas:
* Environmental Engineering: Wastewater discharge permit review & update; air emission inventory update.
* Piping & Pipeline: Minor piping rerouting (10m of 4" schedule 40 carbon steel); replacement of three 2" butterfly valves.
* Process Engineering: Optimization of process parameters (5% yield improvement); calibration of five key process instruments.
* Cross-Disciplinary: HAZOP study; pre-commissioning checklist and procedure development.
Detailed scope descriptions are provided in the attached document (see Appendix).

3. Qualifications:
Bidders must demonstrate a minimum of 3 years' experience in chemical processing with a proven track record of regulatory compliance projects.
4. Proposal Requirements:
Proposals should include:
* A detailed technical design (1-2 pages maximum).
* A comprehensive cost breakdown.
5. Evaluation Criteria:
Proposals will be evaluated based on:
* Technical Approach (50%)
* Cost (30%)
* Experience (20%)

6. Timeline:

*** RFQ Release: April 9, 2025**

*** Questions Due: April 23, 2025**

*** Proposals Due: May 5, 2025**

*** Project Start: May 12, 2025**

*** Project Duration: 3 months**

7. Contract Type: Fixed Price

8. Contact:
Submit proposals electronically to: procurement@chemicalprocessing.com

Appendix: (Detailed scope of work as described in the original prompt would be attached here)

CONTACT

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TIMELINE

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