

REQUEST FOR PROPOSAL (RFP)

Banks-Franco

PROJECT OVERVIEW

Name: Chem Glenn Modernization

Type: Modernization

Location: East Glenn, RI (Factory Complex)

Industry: Chemical Processing

Value: \$9,976,630

Complexity: 1/5

Date: April 09, 2025

Disciplines: Piping & Pipeline, Environmental Engineering, Process Engineering

Regulations: ISO 14001, NFPA Codes

SCOPE OF WORK

Scope of Work: Chemical Processing Plant Modernization Project

Project Goal: Modernize a section of the existing chemical processing plant to improve efficiency and safety, while maintaining compliance with ISO 14001 and relevant NFPA codes. This project focuses on a relatively straightforward upgrade with minimal process changes.

Discipline: Piping & Pipeline Engineering

1. Replace existing 4-inch schedule 40 carbon steel piping sections (approximately 50 linear meters) handling dilute sulfuric acid with equivalent 4-inch schedule 80 PVC piping. This replacement will improve corrosion resistance and reduce maintenance requirements. All work must adhere to ASME B31.3 standards and include detailed as-built drawings and material certifications.
2. Install new 2-inch stainless steel (304L) sanitary piping system (approximately 20 linear meters) for transferring a purified chemical intermediate (solution X) from reactor vessel R-101 to mixing tank T-202. The system will include appropriate valves, fittings, and instrumentation for pressure and flow monitoring, meeting 3A sanitary standards. All welds will be inspected per ASME Section IX.

Discipline: Environmental Engineering

1. Assess the existing wastewater treatment system's capacity for increased production (estimated 10% increase). This involves reviewing existing flow data, conducting a mass balance analysis of the current pollutants, and proposing any necessary upgrades or modifications to the existing system including pump sizing and aeration modifications. A detailed report with recommendations and cost estimates will be delivered.
2. Design and implement a new spill containment system around reactor vessel R-103, adhering to EPA regulations and NFPA 40. This will include a secondary containment sump of sufficient capacity to handle the entire volume of the reactor with appropriate spill prevention, control, and countermeasures (SPCC) plan documentation. Material selection should prioritize chemical compatibility and easy cleaning.

Discipline: Process Engineering

1. Optimize the process control system for reactor R-101 by upgrading the existing Programmable Logic Controller (PLC) with a modern system and implementing advanced process control (APC) strategies. This includes programming the new PLC, integrating with existing SCADA system, and testing the new control loops to improve process stability and reduce energy consumption. Detailed process flow diagrams (PFDs) and instrumentation and control diagrams (P&IDs) will be updated and delivered.
2. Conduct a HAZOP (Hazard and Operability) study for the modified process section surrounding reactor R-101 and mixing tank T-202. This study should identify and assess potential hazards and operability problems associated with the modifications and propose appropriate mitigating measures. The resulting HAZOP report will contain identified hazards, risk assessments, and proposed recommendations.

Cross-Disciplinary Tasks

1. Develop a detailed project schedule integrating the activities of all three disciplines, ensuring efficient workflow and minimizing project downtime. This schedule should account for material procurement, installation, testing, and commissioning timelines, and will be actively managed throughout the project.
2. Coordinate the implementation of modifications to ensure seamless integration of piping, environmental controls and process changes. Regular meetings and clear communication channels between engineering teams and on-site operations will ensure smooth transitions during modifications and commissioning.

Complexity Impact: The project's relatively straightforward nature aligns with a Complexity Level 1 rating.

REQUEST FOR QUOTATION

Request for Quotation: Chem Glenn Modernization Project

Project Name: Chem Glenn Modernization

Location: East Glenn, RI

Industry: Chemical Processing

Complexity: 1/5

1. Introduction:

This RFQ seeks proposals for the modernization of a section of our chemical processing plant at East Glenn, RI. The project aims to improve efficiency, safety, and regulatory compliance (ISO 14001, NFPA codes) with minimal process disruption. The scope encompasses Piping & Pipeline, Environmental, and Process Engineering disciplines. See detailed scope below.

2. Scope of Work:

(See detailed scope provided in the original prompt)

3. Qualifications:

Bidders must demonstrate at least 3 years of experience in chemical processing plant modernization projects, with a proven track record of regulatory compliance.

4. Proposal Requirements:

Proposals must include:

- * A concise technical design (1-2 pages max) outlining the proposed approach for each discipline.
- * A detailed cost breakdown, including all labor, materials, and contingency.

5. Evaluation Criteria:

Proposals will be evaluated based on:

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

6. Timeline:

- * RFQ Release: April 09, 2025
- * Questions Due: April 21, 2025
- * Proposals Due: May 03, 2025
- * Project Start: June 04, 2025
- * Project Duration: 8 months
- * Contract Type: Fixed Price

7. Contact:

Submit proposals electronically to: procurement@chemicalprocessing.com

CONTACT

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TIMELINE

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