

REQUEST FOR PROPOSAL (RFP)

Robinson, Little and White

PROJECT OVERVIEW

Name: Chem Howard Modernization

Type: Modernization

Location: West Howard, VI (Industrial Park)

Industry: Chemical Processing

Value: \$6,044,408

Complexity: 1/5

Date: April 09, 2025

Disciplines: Piping & Pipeline, Environmental Engineering

Regulations: ISO 14001, NFPA Codes

SCOPE OF WORK

Scope of Work: Chemical Processing Plant Modernization - Industrial Park

Project Goal: Modernize existing chemical processing infrastructure within the industrial park to improve efficiency, safety, and environmental compliance. This project focuses on minor upgrades and replacements, not significant process changes.

1. Piping & Pipeline Engineering

* **Task 1: Replace Existing Process Piping:** Replace 50 meters of existing 4-inch schedule 40 carbon steel process piping conveying non-hazardous chemicals (e.g., water, diluted acids) with new schedule 80 PVC piping. Ensure compliance with relevant sections of the NFPA standards for chemical process piping systems, and create as-built drawings reflecting the new pipe material and routing. Deliverables include material specifications, piping isometric drawings, and a bill of materials.

* **Task 2: Upgrade Chemical Dosing System Piping:** Upgrade the existing chemical dosing system piping to improve metering accuracy. This involves replacing 20 meters of existing 1-inch stainless steel 316 piping with new 1-inch PTFE lined stainless steel 316 piping to minimize corrosion and material interaction. The upgrade should include installation of new flow meters (accuracy $\pm 0.5\%$) and isolation valves, with complete as-built documentation provided.

2. Environmental Engineering

* **Task 1: Optimize Wastewater Treatment System:** Implement minor upgrades to the existing wastewater treatment system to improve effluent quality. This includes replacing existing filter media (sand & gravel) in the clarifier with a new media (anthracite coal) for enhanced particle removal. The work should adhere to ISO 14001 guidelines for environmental management systems, including documentation of all waste streams and disposal methods.

* **Task 2: Enhance Spill Containment:** Improve the existing chemical spill containment system around a designated process area (10m x 10m). This involves installing secondary containment berms (height: 0.5m) constructed from reinforced concrete and ensuring they have adequate capacity to handle the worst-case scenario of a spill from the nearest process vessels. Develop an updated spill response plan incorporating the improved containment system and update emergency response procedures in line with ISO 14001 regulations.

Cross-Disciplinary Tasks:

* **Task 1: Piping & Environmental Integration:** The Piping team will coordinate with the Environmental Engineering team to ensure that the new piping system is compatible with the upgraded wastewater treatment system and that all discharge points meet environmental regulations. This includes reviewing discharge permit conditions and ensuring appropriate monitoring points are incorporated into the updated piping design.

* **Task 2: Joint Safety Review:** Conduct a joint HAZOP (Hazard and Operability) study to identify potential hazards associated with the upgraded systems and develop mitigation strategies. Both teams will contribute their expertise to ensure that safety and environmental compliance are fully addressed. The review must adhere to relevant NFPA codes where applicable.

Complexity Impact Note: The project's complexity level (1/5) reflects the minor nature of the upgrades and the lack of significant process changes.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Chem Howard Modernization

Project: Chem Howard Modernization ? Chemical Processing Plant Modernization, West Howard, VI Industrial Park.

Issued: April 9, 2025

Due: May 2, 2025

Project Goal: Modernize existing chemical processing infrastructure to improve efficiency, safety, and environmental compliance. This involves minor upgrades and replacements, not significant process changes. See detailed scope below.

Scope of Work:

1. Piping & Pipeline Engineering:

- * Task 1: Replace 50m of 4? Schedule 40 carbon steel process piping with Schedule 80 PVC (non-hazardous chemicals).
- * Task 2: Upgrade 20m of 1? 316 stainless steel chemical dosing system piping to 1? PTFE-lined 316 stainless steel, including new flow meters (±0.5% accuracy) and isolation valves.

2. Environmental Engineering:

- * Task 1: Optimize wastewater treatment by replacing clarifier filter media (sand & gravel) with anthracite coal.
- * Task 2: Enhance 10m x 10m process area spill containment with 0.5m reinforced concrete berms and update spill response plan.

Cross-Disciplinary Tasks:

- * Task 1: Integrate piping and wastewater treatment system upgrades, ensuring compliance with discharge permits.
- * Task 2: Conduct a joint HAZOP study to identify and mitigate potential hazards.

Deliverables: Material specifications, piping isometric drawings, bill of materials, as-built drawings, updated spill response plan, waste stream documentation, and HAZOP study report.

Qualifications: Minimum 3 years? experience in chemical processing plant modernization, proven regulatory compliance (NFPA, ISO 14001).

Proposal Requirements: Technical designs (1-2 pages), detailed cost breakdown.

Evaluation Criteria: Technical merit (50%), Cost (30%), Experience (20%).

Project Timeline:

- * RFQ Release: April 9, 2025
- * Questions Due: April 27, 2025
- * Proposals Due: May 2, 2025
- * Project Start: May 17, 2025
- * Project Duration: 8 months

Contract Type: Fixed Price

Submit Proposals to: procurement@chemicalprocessing.com

Complexity Level: 1/5

CONTACT

Danielle McCall, Technical Director
Phone: 313.433.7971
Email: danielle@robinsonlittleandwhite.com

TIMELINE

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