

REQUEST FOR PROPOSAL (RFP)

Webb-Hunt

PROJECT OVERVIEW

Name: Synth Wongville Modernization

Type: Modernization

Location: Wongville, CA (Factory Complex)

Industry: Chemical Processing

Value: \$5,253,296

Complexity: 1/5

Date: April 09, 2025

Disciplines: Piping & Pipeline, Environmental Engineering, Process Engineering

Regulations: ISO 14001

SCOPE OF WORK

Scope of Work: Chemical Processing Plant Modernization - Generic Upgrade

Project Goal: Modernize a section of the existing chemical processing plant to improve efficiency and safety while adhering to ISO 14001 principles where applicable. This scope focuses on a low-complexity upgrade (Level 1).

Discipline: Piping & Pipeline

- Upgrade existing process piping: Replace 50 meters of existing schedule 40, 2-inch carbon steel process piping with schedule 80, 2-inch 316L stainless steel piping in the reactor feed section. This upgrade will improve corrosion resistance and enhance safety due to increased pressure rating. Detailed piping isometric drawings and material specifications (including mill test reports) will be delivered.
- Install new 4-inch PVC drain line: Install a new 4-inch diameter PVC drain line (20 meters in length) connecting the new reaction vessel to the existing wastewater treatment facility. The line must be designed to handle a maximum flow rate of 10 L/min and conform to local building codes for chemical drainage systems. As-built drawings and a hydraulic analysis report will be submitted upon completion.

Discipline: Environmental Engineering

- Improve wastewater neutralization system: Retrofit the existing wastewater neutralization system with a new PLC-controlled pH adjustment system to ensure consistent pH levels between 6.5 and 7.5 before discharge. The system will incorporate automatic chemical feed and monitoring capabilities to minimize environmental impact and ensure compliance with local discharge permits. Calibration and operation manuals will be provided.
- Update Spill Containment Plan: Review and update the existing spill containment plan for the targeted area, specifically focusing on the improved drainage system and changes in chemical storage. This will involve a site survey, risk assessment, and updated spill response procedures documented in a revised plan compliant with ISO 14001 standards, where relevant.

Discipline: Process Engineering

- Optimize Reactor Operating Parameters: Optimize the operating parameters of a single existing reactor (Reactor #3) to improve yield by 5% and reduce energy consumption. This will involve process modeling using existing data, developing operational recommendations, and providing a detailed report justifying the changes. The report will incorporate a cost-benefit analysis and an assessment of any downstream impact.

Cross-Disciplinary Tasks:

- Piping and Environmental Integration: The Piping & Pipeline team will coordinate with the Environmental Engineering team to ensure the new drainage system is properly integrated with the existing wastewater treatment facility and complies with all relevant environmental regulations (discharge limits, etc.). This will involve joint site visits and a review of the updated Spill Containment Plan.
- Process and Piping Collaboration: The Process Engineering team will work closely with the Piping & Pipeline team to ensure the new piping materials and sizes selected for the Reactor #3 feed line are consistent with the optimized operating parameters and do not introduce any safety or operational issues. This involves regular communication and joint review of design documents.

Complexity Impact Note: The low complexity level is attributed to the limited scope and the straightforward nature of the upgrades involved.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Synth Wongville Modernization

Project: Synth Wongville Modernization ? Chemical Processing Plant Upgrade (Low Complexity)

Location: Wongville, CA

Issued: April 9, 2025

Due: April 29, 2025

Project Goal: Modernize a section of the existing chemical processing plant to improve efficiency, safety, and environmental compliance (ISO 14001 where applicable).

Scope of Work: See attached detailed Scope of Work document (summarized below).

Summary of Scope: This project involves upgrades in piping, environmental engineering, and process engineering disciplines, encompassing:

- * Piping & Pipeline: Replacement of 50m of 2-inch carbon steel piping with 316L stainless steel; installation of a 20m 4-inch PVC drain line.
- * Environmental Engineering: Retrofit of wastewater neutralization system with PLC control; update of spill containment plan.
- * Process Engineering: Optimization of Reactor #3 operating parameters.
- * Cross-Disciplinary Tasks: Integration of piping and environmental systems; collaboration between process and piping teams.

Qualifications: Minimum 3 years' experience in chemical processing plant modernization, proven track record of regulatory compliance.

Proposal Requirements:

1. Company qualifications and relevant project experience.
2. Detailed technical design (1-2 pages max) outlining proposed solutions for each scope item.
3. Comprehensive cost breakdown.

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

Schedule:

- * RFQ Release: April 9, 2025
- * Questions Due: April 22, 2025
- * Proposals Due: April 29, 2025
- * Project Start: May 10, 2025
- * Project Duration: 7 months

Contract Type: Fixed Price

Submit Proposals To: procurement@chemicalprocessing.com

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.