

REQUEST FOR PROPOSAL (RFP)

Juarez LLC

PROJECT OVERVIEW

Name: Chem Allenton Capacity Enhancement

Type: Capacity Enhancement

Location: Allenton, MT (Industrial Park)

Industry: Chemical Processing

Value: \$2,473,835

Complexity: 2/5

Date: April 09, 2025

Disciplines: Environmental Engineering, Mechanical Engineering

Regulations: ISO 14001, NFPA Codes

SCOPE OF WORK

Scope of Work: Chemical Processing Capacity Enhancement

Project Goal: Increase processing capacity of existing chemical processing units within an industrial park while maintaining compliance with environmental regulations and safety standards.

Project Complexity: 2/5

Applicable Regulations: ISO 14001, Relevant NFPA Codes

I. Environmental Engineering:

- Wastewater Treatment Upgrade:** Assess the existing wastewater treatment plant's capacity limitations considering the increased production output. Design and implement modifications to the biological treatment system, including the addition of a 500 m³ equalization basin constructed from reinforced concrete (ASTM C33 concrete mix) to handle peak flows, ensuring compliance with discharge permits and ISO 14001 standards. Deliver updated P&IDs, calculations demonstrating increased capacity, and an updated environmental impact assessment.
- Air Emissions Monitoring Enhancement:** Install a new continuous emissions monitoring system (CEMS) for SO₂ and NO_x emissions from the main processing unit stack. This system shall utilize certified analyzers meeting EPA Method 7 and Method 7E standards, integrated with data acquisition and reporting software for real-time monitoring and data logging. Deliver a completed installation report, calibration certificates for all equipment, and a comprehensive operational manual.
- Spill Prevention, Control, and Countermeasures (SPCC) Plan Update:** Review and update the existing SPCC plan to accommodate increased chemical storage and handling capacity. This includes revising the plan to reflect updated chemical inventory, implementing improved secondary containment measures for at least three high-risk storage tanks (min. 110% capacity), and conducting a new site-specific risk assessment according to 40 CFR 112. Deliver the updated SPCC plan with revised risk assessment and site maps.

II. Mechanical Engineering:

- Pump Capacity Increase:** Evaluate the existing pumping system capacity limitations for transferring raw materials. Replace two existing centrifugal pumps (capacity 100 m³/hr each) with higher capacity pumps (150 m³/hr each) manufactured to ANSI B73.1 standards and made of 316L stainless steel to handle corrosive chemicals. Provide detailed specifications for the new pumps, including pump curves and performance data.
- Heat Exchanger Optimization:** Analyze the existing heat exchanger network to identify bottlenecks. Redesign and implement a new shell-and-tube heat exchanger with a surface area increased by 25%, using titanium tubing to improve efficiency and corrosion resistance. The design should adhere to ASME Section VIII, Division 1 standards and include detailed thermal and mechanical calculations. Deliver updated P&IDs and detailed engineering drawings.

III. Cross-Disciplinary Tasks:

- Integrated Risk Assessment:** Conduct a joint risk assessment integrating both environmental and mechanical engineering aspects to identify and mitigate potential hazards associated with the capacity increase. This assessment should consider the potential for spills, emissions, equipment failures and their environmental and safety impacts. The deliverable will be a comprehensive risk assessment report including mitigation strategies.
- Permitting and Compliance Coordination:** Collaborate on all necessary permitting applications and regulatory compliance submissions ensuring all designs and modifications comply with relevant ISO 14001 and NFPA standards. This involves joint review of documentation before submission to relevant authorities and managing communication with regulatory agencies. Deliver a complete record of approvals and permits.

Complexity Impact Note: The project complexity is rated as 2/5 due to the relatively straightforward nature of the upgrades and the limited scope of the modifications.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Chem Allenton Capacity Enhancement

Project Name: Chem Allenton Capacity Enhancement

Project Location: Allenton Industrial Park, Allenton, MT

Industry: Chemical Processing

RFQ Release Date: April 09, 2025

Proposal Due Date: April 29, 2025

Project Start Date: May 27, 2025

Project Duration: 3 Months

Contract Type: Fixed Price

Contact: procurement@chemicalprocessing.com

1. Project Overview:

This project aims to increase the processing capacity of existing chemical processing units at the Allenton Industrial Park, maintaining compliance with ISO 14001, relevant NFPA codes, and discharge permits. The project involves upgrades to wastewater treatment, air emissions monitoring, spill prevention, pumping systems, and heat exchangers. Complexity rating: 2/5. Detailed scope is attached (see below).

2. Scope of Work (Summary):

The project encompasses environmental engineering upgrades (wastewater treatment, air emissions monitoring, SPCC plan update), mechanical engineering improvements (pump replacement, heat exchanger optimization), and cross-disciplinary tasks (integrated risk assessment, permitting/compliance coordination). See attached detailed scope for specifics.

3. Proposal Requirements:

* **Qualifications:** Demonstrate at least 3 years of experience in chemical processing plant engineering and a proven track record of regulatory compliance (ISO 14001, NFPA, EPA).

* **Technical Proposal:** Provide concise (1-2 page) technical designs outlining proposed solutions for each scope item.

* **Cost Breakdown:** A detailed cost breakdown outlining all direct and indirect costs.

4. Evaluation Criteria:

* Technical Approach (50%)

* Cost (30%)

* Experience & Qualifications (20%)

5. Timeline:

* **RFQ Release:** April 09, 2025

* **Questions Due:** April 17, 2025

* **Proposals Due:** April 29, 2025

* **Project Start:** May 27, 2025

(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.