

# REQUEST FOR PROPOSAL (RFP)

Burke-Sanchez

## PROJECT OVERVIEW

Name: Drill Josephland Plant Expansion

Type: Plant Expansion

Location: Josephland, MP (Factory Complex)

Industry: Oil & Gas

Value: \$10,607,128

Complexity: 3/5

Date: April 09, 2025

Disciplines: Structural Engineering, Process Engineering, Piping & Pipeline

Regulations: EPA Requirements, API Standards

## SCOPE OF WORK

### Scope of Work: Oil & Gas Processing Facility Upgrade

**Project Goal: Upgrade an existing oil & gas processing facility to increase throughput by 15% and meet updated EPA emission standards.**

Project Complexity: 3/5

Applicable Regulations & Standards: EPA Emission Guidelines, API 650 (where applicable), relevant ASME codes.

#### Discipline: Structural Engineering

1. Platform Reinforcement: Assess the structural integrity of existing process platforms (approximately 50m x 20m) using finite element analysis (FEA) software. Design and detail reinforcement using A36 steel beams and columns to accommodate increased equipment loads (estimated 20% increase) and seismic zones (Zone 3) requirements, producing detailed shop drawings and structural calculations compliant with AISC 360.
2. New Flare Stack Design: Design a new 30-meter high flare stack with a 1.5-meter diameter to handle increased gas flaring volume, complying with API 521 and local air emission regulations. This will include wind load analysis, foundation design (considering soil bearing capacity), and material selection (stainless steel for corrosion resistance), delivering complete fabrication drawings.

#### Discipline: Process Engineering

1. Heat Exchanger Optimization: Evaluate the existing heat exchanger network to identify bottlenecks hindering increased throughput. Design and specify modifications (e.g., adding a new heat exchanger with a 1000 kW capacity, utilizing 316L stainless steel) to improve efficiency and optimize the process, providing P&IDs, process simulations, and material selection justification documents.
2. Gas Treating Unit Upgrade: Develop a process design for upgrading the existing gas sweetening unit (amine based) to handle the increased gas flow rate and improve sulfur removal efficiency to meet EPA standards (less than 10 ppm H<sub>2</sub>S). This includes mass and energy balance calculations, equipment sizing (absorber column, regenerator, etc.), and a HAZOP study report.

#### Discipline: Piping & Pipeline

1. High-Pressure Gas Line Modification: Design and detail modifications to an existing 8-inch diameter, 1000 psi high-pressure gas pipeline (approximately 500 meters in length) including replacing 100 meters of existing pipe with schedule 80 carbon steel pipe, ensuring compliance with ASME B31.8 and API 510. Deliverables include isometrics, stress analysis reports, and material procurement specifications.
2. New Condensate Transfer Line: Design and specify a new 6-inch diameter condensate transfer line (500 meters length) with appropriate pressure relief valves connecting the separator to the storage tank. The design must account for potential thermal expansion and comply with API 650 (tank connection) and ASME B31.3 standards; deliverables include P&IDs, piping layouts, and material specifications.

#### Cross-Disciplinary Tasks:

1. Interface Coordination: The structural, process, and piping teams will collaborate to ensure proper integration of new and modified equipment and pipelines onto existing platforms. Regular meetings and design reviews will be conducted to identify and resolve potential conflicts early in the design phase. A comprehensive 3D model incorporating all disciplines' input will be developed and maintained.
2. HAZOP Study Integration: A comprehensive HAZOP study encompassing all process modifications and new equipment will be performed jointly by the process and piping engineers, with relevant input from the structural engineers regarding platform integrity under potential hazard scenarios. The study will identify and mitigate potential risks to meet safety requirements.

Complexity Impact Note: The project complexity level (3/5) reflects the need for modifications to existing systems and some new equipment additions, requiring detailed engineering and coordination across disciplines.

REQUEST FOR QUOTATION

Request for Quotation (RFQ): Drill Josephland Plant Expansion

Project Title: Drill Josephland Plant Expansion

Project Location: Josephland Factory Complex, Madhya Pradesh, India

Industry: Oil & Gas

Issued Date: April 9, 2025

Due Date: May 17, 2025

Project Goal: Upgrade existing oil & gas processing facility to increase throughput by 15% and meet updated EPA emission standards.

Scope of Work: The project encompasses structural, process, and piping engineering design modifications to an existing oil & gas processing facility. Detailed scope includes:

- \* Structural Engineering: Platform reinforcement (FEA, design, detailing), new flare stack design (30m, 1.5m diameter).
- \* Process Engineering: Heat exchanger optimization (including new 1000kW unit), gas treating unit upgrade (amine-based, <10 ppm H2S).
- \* Piping & Pipeline Engineering: High-pressure gas line modification (8", 1000psi, 500m), new condensate transfer line (6", 500m).
- \* Cross-Disciplinary: Interface coordination, comprehensive HAZOP study.

Applicable Regulations & Standards: EPA Emission Guidelines, API 650, API 521, API 510, ASME B31.3, ASME B31.8, AISC 360.

Project Complexity: 3/5

Required Qualifications: Minimum 3 years of experience in Oil & Gas projects, proven track record of regulatory compliance.

Proposal Requirements: Proposals should include:

1. Company qualifications and relevant experience (max. 1 page).
2. Technical design summary (1-2 pages) outlining proposed solutions.
3. Detailed cost breakdown.

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

Project Timeline:

- \* RFQ Release: April 9, 2025
- \* Questions Due: May 1, 2025
- \* Proposals Due: May 17, 2025
- \* Project Start: May 22, 2025
- \* Project Duration: 16 months

Contract Type: Time & Materials

Submission: Submit proposals electronically to [procurement@oil&gas.com](mailto:procurement@oil&gas.com)

CONTACT

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TIMELINE

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