



BLUESTAR ENGINEERING LTD.

Engineering | Procurement | Construction Management



Who We Are

Bluestar Engineering Ltd. is a Calgary-based Engineering, Procurement, and Construction Management (EPCM) company, providing upstream and midstream engineering consulting services to the oil and gas industry in Western Canada.

Core Competencies

We focus on providing cost-effective, efficient, and well proven fit-for-purpose designs and solutions to our clients. Bluestar provides consulting services to identify, design, plan, execute, and commission capital projects as well as optimize existing assets.

Bluestar is well versed in all phases of project execution, including:

- ★ Concept Selection and Design Development
- ★ Front End Engineering and Design (FEED)
- ★ Detailed Design and Procurement
- ★ Construction Management and Support
- ★ Project Commissioning

Our Capabilities

Bluestar is a fully integrated multi-disciplinary company offering a broad spectrum of engineering services, including:

- ★ Project Management
- ★ Process Engineering
- ★ Mechanical Engineering
- ★ Rotating and Stationary Equipment
- ★ Electrical Engineering
- ★ Instrumentation and Controls Engineering
- ★ Civil Engineering
- ★ Structural Engineering
- ★ Design Drafting and Modeling
- ★ Procurement and Expediting
- ★ Regulatory Consulting
- ★ Document Control
- ★ Project Controls
- ★ Animation and Virtual Reality



Safety

Bluestar's number one priority is compliance with client and industry regulations and standards. From project conception to completion our design approach ensures a safe work environment for all stakeholders.



Accountability

We openly share and discuss all ideas and the process of making decisions. Closing the communication loop, establishes trust and strengthens client relations.



Efficiency

Our approach to project execution ensures your project remains on time and within budget.



Flexibility

Whether it's unique technical challenges, schedule constraints or adjusting staff to meet project workload; Bluestar adapts to your needs.



Quality

We are committed to ensuring precise and consistent deliverables that meet our Quality Management Standards.

Our Expertise

Bluestar's dedicated team of professionals have successfully designed, constructed, and commissioned a wide range of projects across Western Canada. Our past experience provides foundational knowledge for our team to carry forward to new projects with new challenges. Bluestar's fully integrated team approach ensures that lessons learned and experiences are communicated throughout the organization to ensure all clients benefit from our knowledge.



Gas and NGL Processing

Our process engineering team is experienced in all natural gas processing, stabilization, and treating facilities - in both sweet and sour operating conditions. We are well equipped to complete greenfield and brownfield projects - as well as debottlenecking studies, or operational trouble-shooting.



Storage and Terminal Facilities

Bluestar recognizes that production is only part of our industry. Bulk storage and transport facilities are critical to bringing production to market. We have experience in bulk storage, blending, and shipping facilities for a range of petroleum products including both low vapour pressure, and high vapour pressure products



Pump and Compression Stations

For mainline transmission of natural gas and liquid petroleum products Bluestar's project team has a wealth of experience to draw up. Our team has successfully designed, installed, and commissioned significant pump and compression horsepower throughout Western Canada.



Upstream Production & Gathering

The Bluestar team has an excellent background in upstream production and gathering infrastructure for all conventional oil and gas fields in Western Canada. In particular our engineering team focuses on meeting the client requirements while allowing for standardization of design. These customized standard solutions allow client's to maximize operability while reducing design, fabrication, and construction costs.



Conventional Oil Batteries

Our team of professionals have completed a range of conventional oil battery projects for multiple clients in various upstream production environments. Regardless of the oil composition, water content, and other challenges to effective oil treating our team is experienced and able to deliver.



Gas and Liquids Pipelines

The mechanical design team and regulatory group at Bluestar has a strong knowledge of pipeline design for a range of products. Our past experience includes low vapour pressure liquids, high vapour pressure liquids, multiphase fluids, and natural gas pipelines.



Custody Transfer Facilities

In all custody transfer applications accuracy and reliability are paramount. The Bluestar team is well established throughout Western Canada as a leading provider of custody transfer facilities for a range of application.



Regulatory Support

We assist our clients in understanding, and meeting all regulatory requirements as set by jurisdictional authorities. Our team is intimately familiar with all codes and regulations to ensure we provide clear, concise, and actionable advice to our clients regardless of the complexity of the issue.

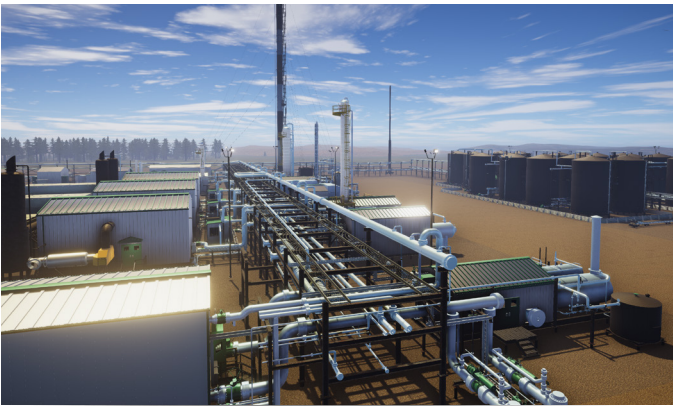
Kakwa Station Phase III Expansion

A part of the larger overall infrastructure developed for a major midstream client, Bluestar was responsible for the design and execution of a brownfield expansion to the existing terminal and pump station. The project scope of work included all discipline engineering to complete the installation and infrastructure to increase facility through to 200,000 BPD main line pump capacity. Significant addition storage capacity was added to the facility, along with midstream fluid injection systems. Our team worked diligently to ensure there were no outages to this critical services asset during construction, commissioning and start-up.



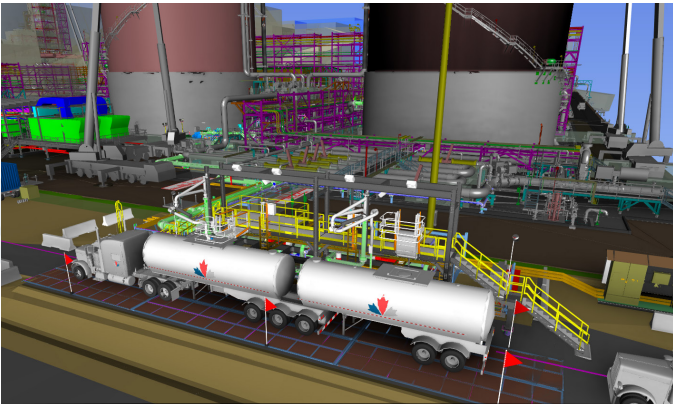
West Doe NGL Gas Plant

Bluestar completed a brownfield design to twin an existing 60MMSCFD gas plant. Through careful client collaboration the Bluestar team was able to optimize the expansion design to increase flexibility and reliability of the existing infrastructure and expansion infrastructure. In addition our team was challenged to cost effectively, and safely modify the existing plant to accommodate sour product. The successful completion of this engineering scope allowed the Client to realize significant system and production optimizations with limited capital cost.



Fort Hills Froth Trucking Terminal

Bluestar was contracted to complete all detailed engineering for the 40,000 BPD froth export trucking terminal on an accelerated schedule. Bluestar provided all discipline engineering on time and on budget to allow for safe commissioning. The project design included new froth pumps and loading rack facilities. In addition a significant number of tie-ins to both the main process and utilities were required to allow for safe commissioning of the downstream Secondary Extraction facility after commissioning of the froth system terminal.



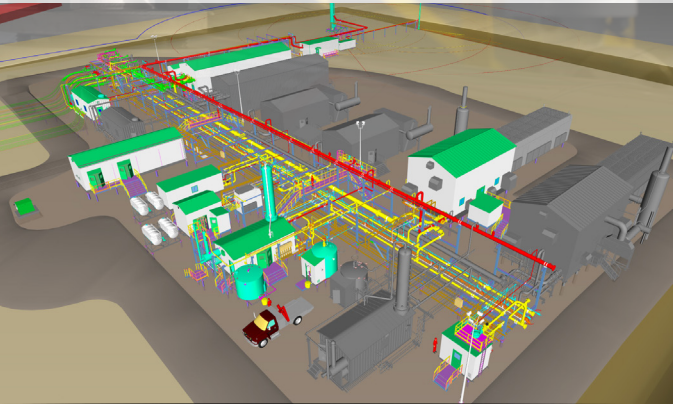
Gundy Custody Transfer Station

Bluestar team was contacted by a major client to execute a custom Lease Automatic Custody Transfer station, to accommodate multiple product batching services. Our firm interfaced with the client systems development team to ensure that all design criteria were satisfied. In addition Bluestar was responsible for executing all gathering laterals to connect to the main pipeline corridor. In this capacity Bluestar was contracted directly by the upstream gas producer. Offering services to both the producer and the midstreamer, we were able to provide integrated project execution.



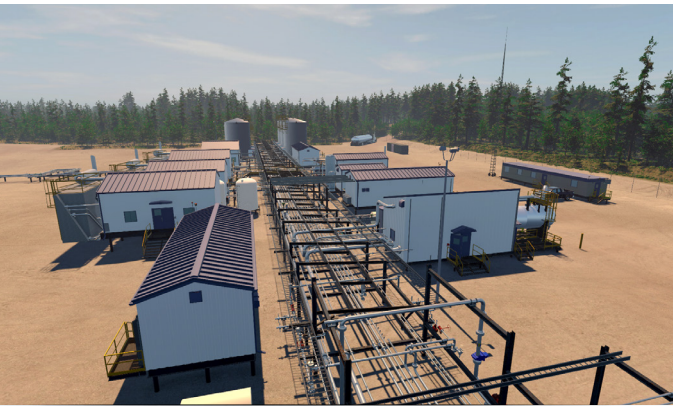
Spirit River Sour Production Hub

In support of an expanding drilling program Bluestar was contracted to optimize field production pressure while fully utilizing existing processing infrastructure. To achieve this the Bluestar team designed and supported construction of a remote production gathering hub to allow for gathering and primary separation of production prior to re-pressurization to allow for downstream processing. The production gathering hub consisted of separation, gas compression, dehydration and emulsion pumping. In conjunction with this project Bluestar was also responsible for the design of a major pipeline network for the high sour production in challenging terrain.



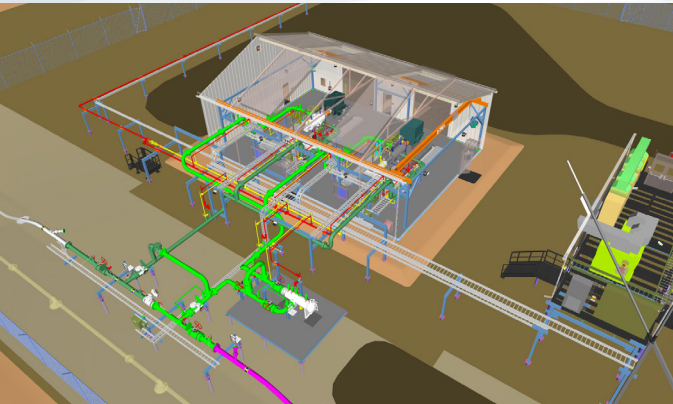
Septimus Oil Treating Battery

A greenfield facility allowed Bluestar to leverage our past experience in oil treating to deliver on time and on budget for a major industry client. This project required experience in primary separation, emulsion treating, and natural gas compression. Bluestar was also responsible for the design of oil truck loading and offloading infrastructure, water treatment, and water disposal. By leveraging our past experience the Bluestar team was able to propose a proven, operable design while also delivering on our commitment for cost effectiveness.



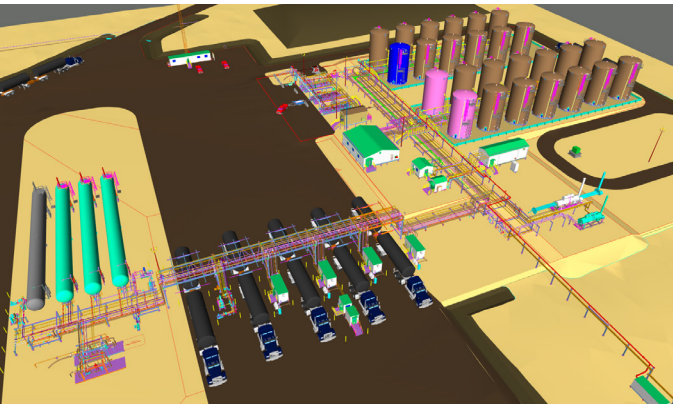
Vantage Liquid Ethane Pump Stations

To optimize an existing pipeline asset for a major midstream client Bluestar was responsible for the detailed design and engineering to install three liquid ethane pipeline booster pump stations. Each station consisted of two redundant main line multistage centerfugal pumps. The project required installation of pump stations at new facilities adjacent to the main line right of way - requiring attention to detail during all phases of the construction. The successful commissioning of this project increased the design throughput of their existing asset by more than 50%.



Mulligan Marketing Terminal

Bluestar was responsible for the detailed design and engineering for multi-product receiving and blending terminal. The facility design included receipt of trucked in production and pipeline production from an associated gathering system. The scope included product receipt and segregation, bulk storage, blending and overall process control to ensure accurate blending to multiple sales product specifications.





The Bluestar Benefit

At Bluestar we believe that our strength is our people. Our team members bring valuable experience and insight to each project. By fostering a team approach to project execution Bluestar ensures the project group is fully engaged to execute for our clients. At the same time our management team recognizes we are a service company - successful only if our clients are successful. By combining the technical excellence of our team members with our passion to deliver for our clients Bluestar offers service experience a unique among our competitors



Client Relationships

The foundation of Bluestar's business model is our strong relationship with our clients. We work to deliver sound, accurate, and reliable technical advice to our clients to ensure they can move forward with confidence in their engineering design. A client-consultant relationship based in mutual respect and clear communication for successful project execution.



Staff Mentorship

Bluestar management recognizes that our team is only as strong as our individual members. Our company focuses on identifying individuals who will thrive in our environment, and developing them into cohesive team members. To support this a strong emphasis is placed on mentorship, communication, and personal responsibility. By supporting each team member in their individual growth and development Bluestar in turn supports the growth and development of the company.

1,000+
Completed Projects

100+
Team Members

20+
Valued Clients

5+
Years of Service

0
Lost Time Incidents

Leadership Team

Our management team is composed of dedicated, focused, and driven individuals who are committed to working together as a team to deliver for our clients. Each partner brings a diverse range of experience and skills to Bluestar - while sharing our values of integrity, personal accountability, and strong work ethic.

The Bluestar management team recognizes the trust our clients place in us, and works each day to deliver on that responsibility.



Nathan Pleau
President



Sean Weimer, CET
Project Design Lead



Cory Weimer
Project Design Lead



Bryan Cawthorn, P.Eng.
Project Manager



Michael Aurini, P.Eng.
Project Manager



Arash Jafarpisheh, P.Eng.
Project Manager



Jesse Barbosa
CSA Design Lead



Neal Zavitz, P.Eng.
Electrical Engineer



Kayla Staples, MBA
Financial Controller



Greg Everett, P.Eng.
Process Engineer



Andrew Blanchard, P.Eng.
Project Manager



Grant Shaw, P.Eng.
Project Manager



Arthur Zdziechowski, P.Eng.
Project Engineer



Nima Rohani, P.Eng.
Electrical Engineer



Ryan Wolsey, P.Eng.
Electrical Engineer

Bluestar Affiliates



A P E G S
*Association of Professional Engineers
& Geoscientists of Saskatchewan*

